102 Minutes

The Untold Story of the Fight to Survive Inside the Twin Towers JIM DWYER & KEVIN FLYNN

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In an interview in the May/June 2005 issue of *Sierra Magazine*, Jared Diamond, author of the best seller *Guns*, *Germs*, *and Steel* and the new bestseller *Collapse*, said, "Technology causes problems as well as solves problems." Perhaps at no time in American history was this axiom more shockingly apparent than when the Twin Towers collapsed in New York City on the morning of September 11, 2001.

Among the many ironies of the 9/11 terrorist attacks, Jim Dwyer and Kevin Flynn's book 102 Minutes: The Untold Story of the Fight to Survive Inside the Twin Towers starkly portrays this one: In the moments before the towers collapsed,

people still inside were vividly and desperately able to communicate that they were about to die, but no amount of communication between responders could save them.

According to Dwyer and Flynn, blocked, botched, scrambled, and conflicting communications are the keystone to this parable of an epic technological failure. Most of us already know that a month before the attacks, intelligence reports warned of them, that long minutes passed before air traffic controllers were aware of the highjackings, and that there was little if any communication between the Federal Aviation Administration and NORAD.

Dwyer and Flynn's book compounds the postmortem horrors of that day with the story of how technological breakdown and a failure of coordination cost tenants their lives inside the Twin Towers.

The New York City Fire Department knew that their radios were outdated and "malfunctioned inside office towers." A

booster in the Twin Towers had been tested but didn't work the morning of the attacks. Before the 1993 bombing at the World Trade Center, NYFD and the Police Department hadn't drilled together at the buildings since 1982. There was no protocol or practice or chain of command for communications between the two departments. Then Mayor Giuliani's Office of Emergency Management was headquartered in the Trade Center complex, but its participation in the rescue efforts was cut off early on when the office was evacuated. In a time-sensitive situation NYFD and NYPD unknowingly duplicated floor searches.

Nowhere is the breakdown of communication sadder than in the story of those above the 78th floor of the South Tower. Only four people above that floor survived. Hundreds died needlessly because they assumed they were trapped. 911 operators did not know there was a way out, one stairway

open to the bottom. They instructed people to wait for rescue. Responders at the "command center" on the ground "seemed to know about it [the stairway]," Dwyer and Flynn claim, but authorities "could not communicate with the ... tenants on the upper floors." Apparently, they did not communicate with 911 operators either.

Before the South Tower was struck, communication caused rather than alleviated confusion. People calling the Port Authority Police Department were told to take the stairs out of the building or to stay put, "depending on which police officer answered the phone." On certain floors people were told twice that they should not leave, then a third announcement said "they could leave if they wanted." People almost out of the South Tower—they instinctively realized the danger when they felt (many did not see it) the concussion of the North Tower—were told it was safe to go

back to work. Many did.

In a likewise tragic lack of communication, police in helicopters could see that the structure of the towers was failing. But NYFD had no link to those reports, and exhausted firefighters, taking a break on a lower floor of the North Tower, perished, believing the building could not collapse. Even if the information was headed to them, the message may never have gotten through overloaded radio frequencies.

Many above the 87th floor of the North Tower headed for the roof, for fresh air if not escape. But the doors were locked. The failsafe computer that was supposed to unlock them in an emergency failed.

This was just another of half a dozen technological failures Dwyer and Flynn discovered in the construction, design, and function of the Twin Towers. Sprayon fireproofing on floor trusses that held the building together had never been tested. Though the building had been built to absorb the impact of a 707 (it was

built before 737s came into use), Dwyer and Flynn point out that "spray on fireproofing in the impact zone was dislodged." Tests after the attacks showed that the spray-on fireproofing lasted only two hours, below the standard of building codes. Sprinkler systems on the floors failed because the jetliners had destroyed the entire water system in both buildings.

The firefighters inside, who had no forewarning that the buildings would collapse, operated according to a fire code they knew well. They assumed fireproofing would, as designed, isolate the fires on the floors above them. They may not have been aware of what Dwyer and Flynn learned, that at the time of the towers' construction "both the architect and the structural engineer ... refused to vouch for the ability of the floors to withstand fire." They may have known that buildings of these heights are not designed to

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evacuate everyone at once, and that to maximize commercial space, each tower was built with only three stairways, whereas the Empire State Building, built in 1931, has nine.

Despite the maddeningly obvious failure of technology and communication on that brutal September morning, this book is not an exposé of failed rescue efforts. It is a work toward the truth of a Titanic-like catastrophe layered in technological hubris and human mishap. Conditions for disaster were present long before the impact of the attacking jetliners. Titanic-like? Yes. Almost everyone in the towers who was also there for the 1993 terrorist bombing believed the towers to be indestructible. (It has been reported that Bin Laden himself was startled when the buildings came down.)

Dwyer and Flynn tell the story with a smart journalistic eye for detail, balance, and structure. The book is frenzied in pace mostly because of the reader's inevitable perspective. Every moment drips with dramatic irony. As we follow the thousands of individual decisions made inside the building, decisions with partial or inaccurate information, we all know those towers will fall. To their credit, Dwyer and Flynn respectfully avoid sensationalism, graphic or macabre description of suffering of ordinary people in an inordinately volatile setting.

With a cinematic feel for the turns of the action, their narrative rides on the dialogue and movement of dozens and dozens of survivors, victims, and responders. Indeed, the core of the story is restricted to the cage the towers became for those struggling inside. The episodes of those who survived and those who perished are woven from the details and artifacts of their last recollected or recorded communications with friends, loved ones, and coworkers, and from the transcripts of emergency calls. Somehow their cell phones, two-way radios, and pager keypads worked while those below wrestled with primitive tools and entrenched methodology, desperate to know what was happening and helpless to get their messages through.

Much like William Langewiesche's American Ground, which describes the technological and engineering feat of deconstructing the collapsed Twin Towers, Dwyer and Flynn celebrate the genius of human improvisation, individual intelligence, and grit in the moment. Langewiesche also made clear that such genius is necessary when bureaucracies, communications, and political red tape fail to grasp the situational awareness a crisis demands. It is unfortunate that 102 Minutes, rendered so humanely, and which should be hailed as a poignant, objective homage to survivors and victims, may be better remembered as a rebuking technological eulogy.

REVIEWER: Wayne K. Sheldrake earned his MFA in creative nonfiction from Antioch University/Los Angeles. He teaches writing at Adams State College in Alamosa, CO, and writes regularly for *America West* magazine.