Figure 3.5. GRAPHICAL ATTRIBUTES: *Heroic self-sacrifice ...*

EM0136: The Globe and Mail, December 21, 2001, page A3

Heroic self-sacrifice cut death toll at WTC

'This is proof those cops and firefighters knew they could die, but they did their job anyway'

BY MIRO CERNETIG, NEW YORK

With the death toll from the World Trade Center attacks at 2,963 and dropping, New Yorkers are understanding how many lives their firefighters and policemen saved.

The number killed, initially feared to be 20,000, declined to more than 6,000 weeks after Sept. 11. But the toll continued to drop, and much of the credit has gone to emergency workers.

According to reports in the New York news media yesterday, many firefighters who entered the burning buildings braved warnings from a senior commander, deputy fire chief Raymond Downey, that the walls could tumble down.

Mr. Downey entered the trade centre, too, becoming one of the hundreds of police officers and firefighters who perished while ensuring that almost all the people below the areas where the two hijacked jets hit were ushered to safety.

"This is proof those cops and firefighters knew they could die, but they did their job anyway, and many of them did die from making that choice to go in," said Amanda Rodruguez, a waitress at a café near the WTC site known as ground zero frequented by firefighters. "If it weren't for them, we would have had a lot more dead people."

But on the streets of Manhattan, where pictures of the missing on walls and light posts are fading, there is concern the dramatic drop in the number of deaths may diminish the magnitude of the tragedy New Yorkers endured.

"Sure, to see that the numbers of the dead [are] going down is the best Christmas gift the city of New York could ever get," said Jimmy Belanger, a truck driver who delivers machine parts in the area of ground zero. "But every day I see the numbers of dead go down, at the back of my mind I kind of worry that folks in other places will start to think, 'Oh, this is not as bad as we thought. Only 3,000 people died in New York, not 20,000.'"

Still, the reduced death toll delighted the small crowds who braved the cold wind and metal detectors as they lined up for yesterday's reopening of ferry service to the Statue of Liberty.

"Hey, it's a good day," said Aldo Campolini, a construction worker who took the ferry to the island where the statue stands guard. "There's less dead at the WTC than we thought. And Lady Liberty is open for business. Who cares if you need to be searched by guards if it keeps America safe?"

More than three months after the terrorist attack, numerous investigations are determining what happened in the minutes before the towers fell. The investigations point to the experience of 1993, when a car bomb exploded in the basement of one of the towers. That attack was an important factor in clearing an estimated 18,000 people from the towers on Sept. 11.

In the 1993 bombing, which killed six people, it took six hours to clear the buildings. Many people stumbled in the darkness because of a lack of battery-powered emergency lighting in the stairwells.

Subsequently, the towers were fitted with battery-powered lights. Exits and staircases were marked with arrows and fluorescent paint. The bombing ensured that workers took fire drills seriously.

All these factors, plus the dedicated firefighters and police officers, helped clear the 110-storey towers in two hours on Sept. 11.

"If there had been a delay of an hour, I think we would be looking for 10,000 bodies," said a policeman guarding the barricades around ground zero yesterday. "It's a major success. If the planes hit higher in the building, we would have saved a lot more people. But we're also lucky the terrorists didn't hit lower. Almost nobody above the fireballs got out alive."

Ralph Mancini, whose architectural firm was on the south tower's 22nd floor, said the 1993 attack clearly influenced his 140 employees' decision to flee.

"From the experience of '93, whenever there was an unusual noise or sound or smell, they were instructed to leave the building regardless of what was being said," Mr. Mancini said, adding that some employees were leaving before the second plane hit and ignored announcements telling south-tower workers they could return to their offices.

The article EM0136 reprinted above and the graphical display overleaf are also used in Chapter 2 of the STAT 231 Course Materials and in Statistical Highlight #24.

The graphical display which accompanied the article EM0136 reprinted above is given overleaf on page 3.12; in the redrafting process, some visual details have been slightly modified from the original display.

- The number of North Tower deaths, shown as 1,434 in the lower pie chart of the original display, is given overleaf as 1,432, to agree with the number in the middle of the display and with the sum of the eighteen numbers in the left-hand bar graph.
  - The sum (2,824) of the six numbers in the lower pie chart is then 139 smaller than the 2,963 given in the second line of the article above for the death toll at the WTC.

The loss of graphical quality, arising from the postscript-to-pdf conversion, in some parts of the *screen* image of the display overleaf is largely avoided in the postscript version of the file printed on a postscript printer.

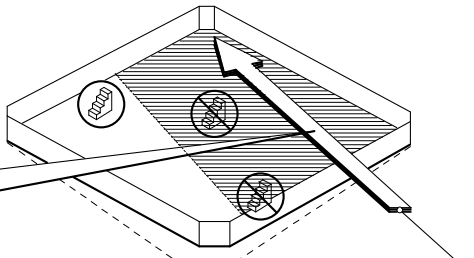
(*continued overleaf*)

EM0136: The Globe and Mail, December 21, 2001, page A3 (continued)

Escape by numbers

All but four people at or above the crash sites died. The majority of people below the crash sites lived.

The aircraft crashed into the south tower at an angle. One of the three stairwells is left intact.

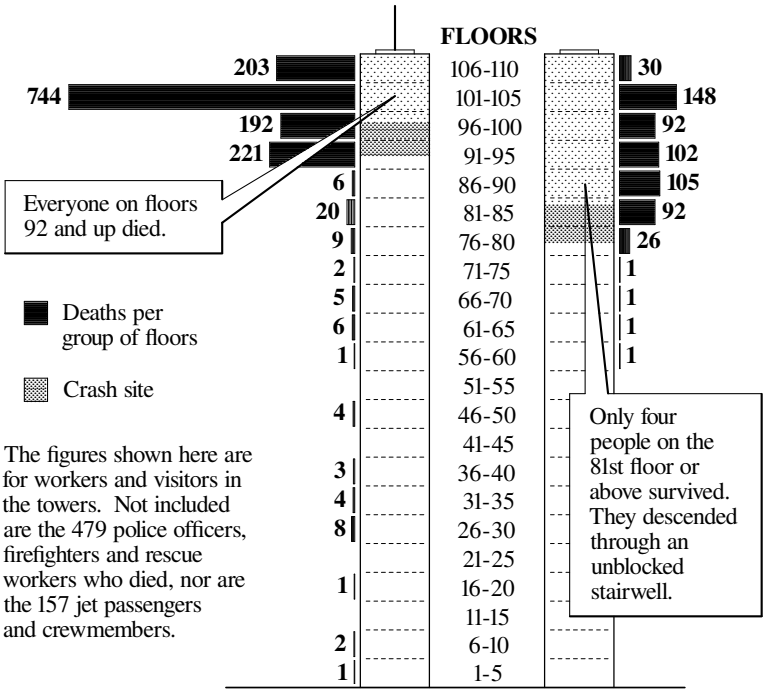


Path of Flight 175

The victims in the towers

North tower
total deaths: 1,432
American Airlines Flight 11, carrying 92 people, strikes floors 93 to 98.

South tower
total deaths: 599
United Airlines Flight 175, carrying 65 people, strikes floors 78 to 84.

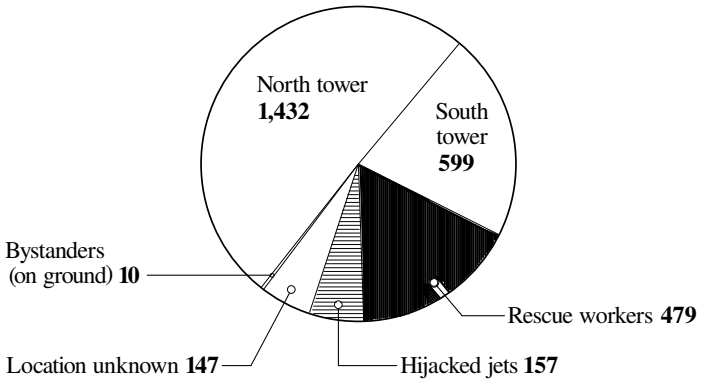


Everyone on floors 92 and up died.

Deaths per group of floors

Crash site

The figures shown here are for workers and visitors in the towers. Not included are the 479 police officers, firefighters and rescue workers who died, nor are the 157 jet passengers and crewmembers.

Only four people on the 81st floor or above survived. They descended through an unblocked stairwell.

The victims of the attack