

The collapses of the two towers further focused the emergency responders' activities south of Vesey Street. FDNY moved its Command Post north on West Street towards Chambers Street, as a succession of FDNY officials took command of the incident.

2.2.3 10:29 a.m. to 5:21 p.m. EDT

The emergency responders quickly recognized that WTC 7 had been damaged by the collapse of WTC 1. A number of fire teams entered WTC 7 to examine the damage, locate fires and possibly extinguish them, and search for occupants.

As early as 11:30 a.m., FDNY found that there was no water supplied by the hydrant system to fight the fires that were visible. With the collapses of the towers fresh in their minds, there was concern that WTC 7 too might collapse, risking the lives of additional firefighters. Within the next two hours, serious discussions were underway regarding the cessation of any efforts to save WTC 7, and the final order to cease was given at about 2:30 p.m. The Con Edison substation was shut down at 4:33 p.m. (NIST NCSTAR 1-9, Chapter 6).

2.3 PROGRESS OF THE FIRES IN WTC 7

General

Even though available images showing fires in WTC 7 did not allow the detailed description of fire spread that was possible for the WTC towers, there was sufficient information to derive general descriptions of fire ignition and spread on various floors of the building (NIST NCSTAR 1-9, Chapter 5). It must be kept in mind that the fire observations were based on images of the exterior faces, which provided little indication about the behavior of fires well removed from the exterior walls. It is likely that much of the burning took place beyond the views of the windows. Relatively little smoke was seen emanating from the windows on the north face, even when flames were observed, indicating that the hot combustion products were not exhausting through the nearest openings, but instead were passing through the building interior to other exits. The wind direction was from the north, and since there would have been office furnishings spread across the tenant spaces, some of the air would have penetrated to the building interior and supported combustion of the furnishings located there. Features of this interior burning were reconstructed from the computer simulations of the fires, as described in NIST NCSTAR 1-9, Chapter 9.

Most likely, the WTC 7 fires began as a result of burning debris from the collapse of WTC 1 at about 10:28:22 a.m. Soon after that, there were numerous vehicles around WTC 7 that were on fire, presumably ignited by burning debris from the tower. It is likely that nascent fires were also growing within WTC 7 around the same time, although visual evidence of fires in the building was not available until around noon. From the fire spread patterns, it is also likely that the fires began around the western half of the south face.

Fires broke out on at least 10 floors of WTC 7, near the damaged southwest corner of the building (NIST NCSTAR 1-9, Chapter 5). They were typically observed as single floor fires, and observations supported a local fire origin on an given floor. Unlike the WTC towers, there was no dispersion of jet fuel in WTC 7 causing simultaneous fire initiation over extensive areas of a single floor or over multiple adjacent floors.