

8.5 FINDINGS ON OPERATIONAL CODES, STANDARDS, AND PRACTICES

8.5.1 General

- Although not required to conform to NYC codes, The Port Authority adopted the provisions of the proposed 1968 edition of the NYC Building Code, more than three years before it went into effect. The proposed 1968 edition allowed Port Authority to take advantage of less restrictive provisions and of technological advances compared with the 1938 edition, which was in effect when design for the WTC towers began in 1962.
- The NYC Department of Buildings reviewed the WTC tower drawings in 1968 and provided comments to The Port Authority concerning the plans in relation to the 1938 NYC Building Code. The architect-of-record submitted to The Port Authority responses to those comments, noting how the plans conformed to the 1968 NYC Building Code
- In 1993, The Port Authority and the NYC Department of Buildings entered into a memorandum of understanding that restated The Port Authority's longstanding policy to ensure that its facilities in the City of New York meet and, where appropriate, exceed the requirements of the NYC Building Code.
- The Port Authority was not required to yield, and appears not to have yielded, jurisdictional authority for regulatory and enforcement oversight to the New York City Department of Buildings. The Port Authority was created as an interstate entity, under a clause of the U.S. Constitution permitting compacts between states, and is not bound by the authority of any local or state jurisdiction.
- It was remarkable that the Investigation Team was able to obtain the large quantity of documentation of the construction and subsequent modification of the WTC towers. Such documents are normally not archived for more than about 6 years to 7 years, with no requirements for storage remote from the building. In the case of the WTC towers, The Port Authority and its contractors and consultants maintained an unusually comprehensive set of documents, a dominant portion of which had not been destroyed in the collapse of the buildings but was assembled and provided to the Investigation Team.
- The Architect of Record was responsible for specifying the fire protection and designing the evacuation system. There was not, and still is not, a requirement for a fire protection engineer to be part of the process. In the case of the WTC towers, the building owner played a significant role in specifying the fire protection and evacuation systems.
- The current state-of-practice is not sufficiently advanced for engineers to routinely analyze the performance of a whole structural system under a prescribed design-basis fire scenario.
- Buildings were not (and still are not) specifically designed to withstand the impact of fuel-laden commercial aircraft, and building codes in the United States do not require building designs to consider aircraft impact.