

# *Waiting for Seven: WTC 7 Collapse Warnings in the FDNY Oral Histories*

Graeme MacQueen  
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## *Abstract*

*On September 11, 2001 there were numerous advance warnings of World Trade Center 7's collapse, and many people have argued that these warnings are evidence that the building was subjected to controlled demolition. But other researchers feel the warnings are compatible with the hypothesis of natural collapse from damage that the building sustained throughout the day. In this article I examine the arguments of one researcher, Ryan Mackey, who argues, using the oral histories of the New York Fire Department, that the collapse was natural and the warnings rational and based on direct perception. Although I agree with Mackey that the damage to Seven was serious and must be acknowledged as such, I argue that a close reading of the FDNY oral histories does not support his claims and does not remove the cloud of suspicion that hangs over the collapse warnings. The majority of FDNY members did not rationally conclude, on the basis of direct perception of damage to the building, that it was in danger of collapse; they accepted that it would collapse on the basis of what they were told.*

In the debate over the collapse of World Trade Center 7, warnings of the building's collapse have come to play an important role. In addition to the numerous collapse warnings mentioned in written documents such as those I will be using in this article, we have seen a growing number of videotape fragments and interviews in which people appear to have been told in advance of Seven's collapse.[1] Many proponents of the controlled demolition hypothesis take these cases, both written and video, as evidence that the building's collapse was brought about deliberately. How could people have suspected or even known with certainty hours in advance that the building was going to collapse if this collapse was not under human control? These arguments typically try to place the event in historical context, stressing how unusual it was for a steel-framed skyscraper to undergo this kind of total collapse, whether from fire or from other possible causes. In this way they stress the peculiarity and the suspect nature of the advance warnings.

But those who think that Seven's fall was natural rather than deliberate have not shied away from the collapse warnings. They have simply interpreted them in a different way. In essence, they have said that the warnings were rational and expected given the severe damage Seven had sustained. These researchers may even consider collapse warnings, when combined with other factors, as evidence positively favouring the hypothesis of natural (non-demolition) collapse.

Mark Roberts, for example, has set forth a detailed collection of collapse warnings, many of which are drawn from the oral histories of the New York Fire Department, [2] and has tried to use these to support his hypothesis of a natural collapse.[3] Ryan Mackey has used this material in a similar fashion.[4] Since I find Mackey's reasoning more clear than Roberts' I will take him in this paper as representative of this position.

Here are four of Mackey's comments on the issue. All quotations are taken from his recent and lengthy monograph criticizing David Ray Griffin's book, *Debunking 9/11 Debunking*. [5]

I. "Based on these numerous, corroborating accounts, coupled with video of the fires in WTC 7 and the fact that it burned for over six hours, there is indeed a better explanation than explosives for why the collapse was expected. There is some disagreement between firefighter accounts about exactly how many floors were burning or how intensely, but there can be no dispute that the fire persisted for hours, that the structure weakened, or that firefighters believed on this basis that the structure was likely to collapse."

II. "Dr. Griffin is faced with a difficult problem. He is attempting to equate prediction of the collapses with conspiracy to demolish WTC 7, or at the very least cognizance thereof. As numerous accounts indicate, both in official interviews and ordinary reporting, the FDNY collectively knew that WTC 7 was in danger of collapse hours before it finally fell. If Dr. Griffin wishes to maintain his theory, then he must make a painful choice:

1. Accept that the FDNY was part of the plot to destroy WTC 7.
2. Accept that the FDNY knew of the plot, but did nothing to stop it, and to this day refuses to talk about it.
3. Propose that someone "in the know" tricked a high-ranking member of the FDNY into *thinking* that it would collapse, and:
  - a. This duped individual convinced many more firefighters that it would collapse;
  - b. Those so informed believed it would collapse;

- c. Not a single FDNY member expressed doubts about what they were told, based on their own experience and the actual condition of WTC 7; and
- d. The structure burned and showed unmistakable signs of weakening anyway.

All of these three choices suggest (and insultingly so) highly unlikely behavior on the part of the firefighters. None has the slightest support in evidence. The rational conclusion, again, is that their training and observation led them to conclude, correctly, that WTC 7 was in danger of collapsing.”

III. “In summary, the ‘unique features’ of WTC 7’s collapse are completely logical, and were obvious to the rescue workers on site. Dr. Griffin’s suspicions, namely that the knowledge of collapse and more rapid removal of debris is proof of a conspiracy to destroy WTC 7, has no grounding in reality.”

IV. “From the firefighter comments, there are a few elements common to virtually every single account that must be considered as credible:

- Fires persisted from the WTC 1 debris impacts up to the final collapse of WTC 7
- Fires were present on multiple floors
- Fires were considered a threat to the building’s structural integrity

It is the third point that poses the biggest problem to Dr. Griffin’s theory. Not one firefighter interview expresses doubt or surprise at the collapse of WTC 7, even though accounts do differ in other details.”

Before turning to Mackey’s central argument, I want to draw attention to two distinctions I believe he ought to have made more clearly, the distinction between certainty and uncertainty in a collapse warning, and the distinction between early and late warnings. These distinctions seem to me to be very important. To take extreme examples: if someone sees a building that has been burning for hours and is manifesting various signs of damage and says, “I’m worried about the possibility that this building might collapse, so I’m going to establish a safety zone around this building” this is quite different from someone saying hours earlier when damage is much lighter, “I know for a certainty that, later on today, this building will collapse.” The second case invites much more skepticism about natural collapse than the first.

But let us return to Mackey. What is his argument? I believe the main points are as follows:

1. Building Seven was seriously damaged early in the day and this damage progressed as the day went on.
2. FDNY members at the scene, whose testimony has been preserved, directly perceived this damage.
3. These FDNY members rationally concluded from what they perceived that the building was in danger of collapse.
4. The collapse warnings in the FDNY collection are merely the manifestation of this rational conclusion.

I will focus on statements three and four in this article.

Mackey speaks, in his monograph, in support of the following principle, consistent with the scientific method: “Claims that can be verified, either through calculation and experiment or independent confirmation, are the most valuable (and you should consider verifying them yourself, if you are able).” [7] This is a good principle, and in keeping with it I have investigated five questions in relation to the FDNY oral histories:

- (1) In the FDNY oral histories, how many FDNY members report hearing warnings of Seven’s collapse?
- (2) What was the degree of certainty in these warnings? If we create a binary system, how many firefighters can we classify as hearing that that the building *might* come down and how many can we classify as hearing that it *would* come down?
- (3) To the extent that we can determine times from the testimonies, how long before the actual collapse were the warnings received?
- (4) Who ascertained that the building was headed for possible or certain collapse—the FDNY members reporting the warnings or other parties such as their official superiors?
- (5) How many FDNY members gave causes of the expected collapse and what causes did they identify?

My method of answering these questions has been the old-fashioned one of reading the FDNY oral histories in their entirety. We can find most references through directed computer searches, but inevitably some cases slip through.

Although there is some degree of subjectivity in the decision as to what cases to include and how to classify cases, Appendices A and B represent my best attempts. Appendix A lists the witnesses and Appendix B records my coding of each case. Please note that these lists and tables do not attempt to capture all references to damage to Seven and even less do they claim to capture all references to building Seven in the oral histories. They deal only with *collapse warnings*.

On the basis of the findings summarized in these appendices, the five questions posed may now be answered.

- (1) In the FDNY oral histories, there are about 60 FDNY members who report hearing warnings of Seven’s collapse.
- (2) Of these 60 cases, only two have an unknown degree of certainty. Thirty-one cases qualify as “definite” (Seven is thought definitely to be coming down), while 27 qualify as “indefinite” (Seven might come down).
- (3) In 27 cases time could not be determined. Of the remaining cases, 17 warnings were received less than two hours before collapse, while ten were received two or more hours before collapse and six appear to have been received four or more hours before collapse.
- (4) In five cases it is unknown who ascertained that the building was headed for possible or certain collapse. Of the remaining cases, seven FDNY members personally ascertained or affirmed the possible or definite collapse, while in 50 cases this judgment was made by others, typically official superiors. (There are two cases where the judgment was made on the basis of both self and other—hence the failure of these numbers to add up to the correct total.)

(5) In 38 cases no cause of collapse is given. Of the remaining cases, no member gives other (non-fire) damage as sole cause of collapse; 15 members give fire alone as cause of collapse; and seven members give a combination of fire and other damage as cause of collapse.

Before turning directly to Mackey's argument, I note that almost half of the warnings where time can be estimated were received over two hours in advance of the building's collapse, and I also note that over half of the total collapse warnings are definite (we are dealing with more than suspicions and worries and estimates). These findings put a burden on any hypothesis of natural collapse.

But let us turn to the third statement I listed in my summary of Mackey's argument. Is it true that FDNY members rationally concluded from what they perceived that the building was in danger of collapse? Only seven appear to have done so, whereas 50 accepted the collapse prediction from others, typically superiors.

With regard to the fourth point in the argument, is it true that the collapse warnings were mainly the result of a rational conclusion based on observation and training? No. As far as we can tell, no rational conclusion based on direct perception was made in the vast majority of cases.

Two additional claims made by Mackey merit comment. Among the "few elements common to virtually every single [FDNY] account," he says, is this one: "Fires were considered a threat to the building's structural integrity." This is incorrect. In the 60 cases of collapse warning, the great majority of FDNY members do not report that they thought fire was a threat to the building's structural integrity. In addition, says Mackey, "not one firefighter interview expresses doubt or surprise at the collapse of WTC 7." This is also wrong, as we can see, for example, in the testimony of Kevin Howe:

"I remember when 7 World Trade came down and everybody was like shell shocked. I mean this was a 47 story building. We all ran. We were like oh, my god, here we go again. It just gave us the creeps." [8]

That most FDNY members seem to have accepted both the collapse warnings and the collapses themselves with few questions appears to be true and deserves to be discussed. But Mackey overstates his case and thereby weakens it.

As will be clear by now, my research refutes the claim that the FDNY witnesses as a body perceived with their own eyes that Seven was severely damaged and on that basis *concluded* that it was at risk of total collapse. My research shows that the great majority of witnesses *accepted* that Seven was going to collapse because they were *told* that it was going to collapse.

But if this is the case, how did the notion of total collapse arise in the first place? The FDNY oral testimonies do not give a satisfactory answer to this question.

A variety of high ranking individuals in the FDNY suggest in their testimonies that they concluded on the basis of their own observation that the building was going to collapse. As will be seen in Appendix C, which lists the seven cases of independent observation and assessment, Chiefs Fellini, Goldbach and Nigro felt the collapse warnings were supported by their own observations. And, outside the context of the formal oral histories conducted by the World Trade Center Task Force, there are

testimonies in *Firehouse Magazine* with Captain Boyle and Deputy Chief Hayden where these officers give signs of structural damage (the large hole supposedly created by debris from WTC 1, as well as creaking, leaning and bulging in WTC 7) that they say led them to worry about the stability of the building and, in Hayden's case, to conclude at about 2:00 p.m. that the building "was going to collapse." [9] But many of us will not be satisfied with this answer. Hayden, for example, was on the scene before the collapse of either of the Twin Towers and got a good look at the damage the Towers sustained. On this basis he thought (and he says other members of the department agreed) "that there was going to be a partial collapse, a gradual collapse after a couple of hours of burning." [10] We have independent testimony to the same effect from other FDNY members. In fact, when interviewees say in the FDNY oral histories that they were worried that the Twin Towers might collapse, it almost always turns out that what they were worried about was partial collapse--they worried, for example, that the portion of the building above the impact site might fall off (Appendix D). Almost without exception, they were staggered by the collapse that actually took place, which was sudden, violent, complete, symmetrical and extremely rapid. But if Hayden had only partial collapse in mind when he saw the Towers, with their obvious and major damage, on what basis did he conclude that WTC 7 was "coming down?" It is not clear what reasoning led him from "a visible bulge, it ran up about three floors" [11] to the kind of collapse that eventually took place. It seems to me quite possible that this is a case where customary expectations had been destroyed by the collapses of the Towers. In fact, Hayden says, "under any normal circumstances, that's a major event, a 47-story building collapsing. It seemed like a firecracker after the other ones came down..." [12]

The two possibilities at issue here should be kept separate. The chiefs may have concluded that Seven was going to collapse on the basis of their pre-9-11 experience; or they may have concluded that Seven was going to collapse *on the basis of what they experienced on 9-11 itself with the collapse of the Towers*. These are not at all the same. If the collapses of the Towers are themselves suspect events, as they are for many of us, then we are not happy when someone treats these collapses as natural and makes conclusions accordingly.

There is another possibility that does not require anyone in the FDNY to have been "in the know." I refer to one of the options Mackey apparently regards as outlandish:

"someone 'in the know' tricked a high-ranking member of the FDNY into *thinking* that it would collapse, and:

- e. This duped individual convinced many more firefighters that it would collapse;
- f. Those so informed believed it would collapse"

I have seen no direct evidence in the FDNY oral histories to support this hypothesis. But it is certainly not irrational to include it in our repertoire as a possibility and to explore it further. We have, as a comparison case, the important warning relating to the Twin Towers, made shortly before the collapse of the South Tower. I believe it is worth reminding readers of this warning so I will quote FDNY Chief Peruggia's account at length. [13]

“I was in a discussion with Mr. Rotanz and I believe it was a representative from the Department of Buildings, but I’m not sure. Some engineer type person, and several of us were huddled talking in the lobby and it was brought to my attention, it was believed that the structural damage that was suffered to the towers was quite significant and they were very confident that the building’s stability was compromised and they felt that the north tower was in danger of a near imminent collapse.

I grabbed EMT Zarrillo, I advised him of that information. I told him he was to proceed immediately to the command post where Chief Ganci was located...”

Q. “They felt that just the one building or both of them?”

A. “The information we got at that time was that they felt both buildings were significantly damaged, but they felt that the north tower, which was the first one to be struck, was going to be in imminent danger of collapse. Looking up at it, you could see that, you could see through the smoke or whatever, that there was significant structural damage to the exterior of the building. Very noticeable. Now you know, again, this is not a scene where the thought of both buildings collapsing ever entered into my mind.

I was there in 1993, 14 minutes after the bomb went off. I operated some 16 hours at the building and with all the post-incident critiques and debriefings with various agencies. We were always told by everyone, the experts, that these buildings could withstand direct hits from airplanes. That’s the way they were designed. They went through all of this architectural stuff, way beyond the scope of my knowledge.

It was hit by an airplane. That’s okay. It’s made to be hit by an airplane. I mean I think everyone may have believed that. We were all told years ago it was made to be hit by an airplane.”

When Zarrillo carried Peruggia’s startling news of imminent collapse to Chief Ganci, Ganci’s response was, “who the fuck told you that?” [14] Ganci had bet the lives of his firefighters on the stability of the Towers. In fact, the lives of hundreds of firefighters had been wagered on the experience of fire chiefs who never suspected collapse. Ganci had almost certainly been told, like Peruggia and others in the FDNY (see Appendix E), that planes could not cause the Towers to collapse. Ganci is dead—he died in the collapse of the North Tower—but his question remains a good one: Who told you that?

In my view, all three building collapses were peculiar in the extreme, and we have a perfect right to ask who determined that they were going to collapse and on what basis. We need not apologize for asking whether there might have been an “engineer type person” who told crucial members of the FDNY that Seven’s stability was compromised, after which this warning was passed on and largely accepted by the rank and file. (Note Goldbach’s statement in Appendix C that “they said it suffered some form of structural damage”—do we know who “they” refers to?) Exploring this possibility further remains an important task.

But if, as many in the 9-11 truth movement believe, the damage sustained by Seven in no way justified the collapse that eventually took place, how could so many of the firefighters have accepted without question the warnings of such collapse? I cannot answer this question with certainty but I can make suggestions.

First, we should remember that Hayden is not the only one whose expectations were overturned by the earlier events of the day. With the collapse of the Towers,

normality had been fractured. ("I'm doing this 23 years...This changed all the rules. This changed all the rules. This went from a structure to a wafer in seconds, in seconds." [15]) In the FDNY oral histories we can see the progressive adjustment to the abnormal even between the collapse of the South Tower and that of the North Tower. The first collapse was met with almost universal shock, but after that building came down people on the scene were less confident the second building would remain standing, and when it came down they were less surprised. ("At that point I stopped myself and thought to myself, you've got to be smart about this. The first tower came down. There's a great chance that the second one might as well.") [16]) There is nothing irrational here. However unexpected the first collapse may have been, once it occurred any confidence that the second tower was immune to collapse was naturally destroyed. Through the same process, a collapse of a 47-story steel-framed high-rise, such as normally would have seemed beyond the pale, was by late afternoon no longer surprising.

Secondly, many of those FDNY members on the scene who had already experienced the horrors of the earlier part of the day were in shock or otherwise unable to function normally. We perceive a high degree of exhaustion and resignation in their accounts. ("At that point we were just I think, everybody, the emotions were fried." [17]) They had seen chaos and horrors, and over three hundred of their companions were dead. They felt like a "defeated army;" [18] they felt this was "just one of those wars we were just going to lose" [19]. Paramedic Delgado's response to Seven's collapse is indicative of this spirit: "they said it's collapsing and I didn't even give a shit anymore." [20]

This resignation seems to have led to a kind of innocence, in which even quite precise demarcation of the collapse zone raised no doubts. In DeCosta Wright's interview we have the following exchange:

Q. "Were you there when building 7 came down in the afternoon?"

A. "Yes."

Q. "You were still there?"

A. "Yes, so basically they measured out how far the building was going to come, so we knew exactly where we could stand."

Q. "So they just put you in a safe area, safe enough for when that building came down?"

A. "5 blocks. 5 blocks away. We still could see. Exactly right on point, the cloud stopped right there." [21]

I do not think it is too much to suggest that at this point in the day the firefighters had reached a stage allied to, although more extreme than, that reached by many in the general American population on 9-11. Shock and chaos had led to a willingness to accept interpretations of events that would normally have been rejected as unreasonable or unlikely.

There is a further matter we must become aware of if we wish to understand the strange lack of interest in Seven's collapse in the FDNY oral histories. It has to do with guidelines operative in at least some of the World Trade Center Task Force Interviews.

When Firefighter Michael Morabito attempted to talk about the collapse of Seven in his interview he was interrupted by his interviewer with the words, "They don't really want to know about 7." [22] What are we to make of this? Was Seven targeted for exclusion in these interviews? I believe there was a principle of exclusion operative in at least a portion of the interviews, but the evidence suggests it was quite broad and relegated to secondary status virtually everything that occurred after the collapse of the

Towers. When Lieutenant Michael Hadden asked his interviewer, "Do you want me to tell you what I did the whole day?" he received the reply, "No, no, that's fine. What we're interested in is the time around the collapse." [23] It is clear from the context that the collapse in question was that of the Twin Towers. This guideline is confirmed by another interviewer, who said he wished to hear the interviewee's story until, "Roughly noon, somewhere around then." [24]. Interviewer Monty Feiler was explicit at the start of his interview with Lieutenant Howard Hahn about his time frame. "What I'd like you to do is if you can just relate a scenario of what happened on the morning of September 11th, how you became involved, and go up to the second building collapse." [25] And Fire Marshal Pat Campbell used very similar language: "We are here to get a history today of the events that happened on September 11. What we are interested in is that from the time you became aware of the attack until the first plane hit the south tower until after the second tower had collapsed." [26]

Not all interviewers, obviously, adhered to these guidelines (or were, perhaps, even aware of them): if they had, we would not have the little we do possess about the collapse of Seven. But we do encounter interviewers who terminated the interview abruptly once the collapses of the Towers had been dealt with. [27]

I do not know why this guideline was established and whether it has a sinister or an innocent meaning. But the result has been that the collective narrative related by the FDNY climaxes with the collapse of the Towers and effectively ends shortly thereafter. Building Seven appears as an afterthought.

Restoring Seven's profile has been the work of the 9-11 truth movement. In my view the restoration should continue until the public is fully informed of this building, the peculiar nature of its collapse, and the equally peculiar foreknowledge of this collapse. I have three recommendations, which I add to those already made in the course of the article, for future research:

1. There should be a comprehensive study of the progressive damage sustained by WTC 7 on 9-11, taking into account all forms of evidence available and all sides and floors of the building. Of course, NIST's final report on Seven should include such a study, but not all of us are confident NIST will do the job responsibly. In any case, why wait for NIST?

2. There should be a comprehensive historical and comparative study of all collapses of steel-framed buildings, whether total or partial, so that instead of warring rhetoric we will have a solid set of cases with which to compare the collapse of Seven.

3. There should be a study of collapse warnings and foreknowledge of building collapses—I would suggest the scope be quite broad—so that we will know how normal or abnormal the collapse warnings are in the case of Seven.

Until these research projects are complete I will continue to regard the WTC 7 collapse warnings as one of the many serious 9-11 anomalies that force us to view the official narrative of the day with skepticism.

## NOTES

1. A very helpful website for the study of WTC 7 is:

<http://wtc7.net/>

A useful compilation of relevant material, with good images of the collapse itself, can be found in the short film, “WTC7: The Smoking Gun of 9/11” (updated, March 10, 2007) at the link that follows. (I do not, however, endorse all parts of the video.)

<http://video.google.com/videoplay?docid=2073592843640256739>

2. The approximately 500 FDNY oral histories can be found on the website of the *New York Times*:

[http://graphics8.nytimes.com/packages/html/nyregion/20050812\\_WTC\\_GRAPHIC/met\\_WTC\\_histories\\_full\\_01.html](http://graphics8.nytimes.com/packages/html/nyregion/20050812_WTC_GRAPHIC/met_WTC_histories_full_01.html)

3. See the eyewitness accounts in Part II of Mark Roberts’ material at:

<http://wtc7lies.googlepages.com/introduction>

4. Ryan Mackey, *On Debunking 9/11 Debunking: Examining Dr. David Ray Griffin’s Latest Criticism of the NIST World Trade Center Investigation* (Version 1.1, 21, September 2007; Original Release 31 August 2007)

<http://911guide.googlepages.com/ryanmackey>

5. Mackey, p. 121-126.

6. Mackey, p. 164.

7. FDNY oral history 9110469, p. 10.

8. See the first hand accounts of Captain Chris Boyle (*Firehouse Magazine*, August, 2002) and Deputy Chief Peter Hayden (*Firehouse Magazine*, April, 2002):

<http://www.firehouse.com/terrorist/911/magazine/gz/boyle.html>

<http://www.firehouse.com/terrorist/911/magazine/gz/hayden.html>

9. Hayden, p. 3.

10. Hayden, p. 5.

11. Hayden, p. 5.

12. FDNY oral history 9110160, pp. 17-18.
13. Zarrillo's testimony in FDNY oral history 9110161, p. 6.
14. James Canham, FDNY oral history 9110370, p. 25.
15. Glenn Asaeda, FDNY oral history 9110062, p. 24-25.
16. Timothy Burke, FDNY oral history 9110488, p. 17.
17. Zachary Goldfarb, FDNY oral history 9110145, p. 46.
18. Hayden, p. 5.
19. FDNY oral history 9110004, p. 24-25.
20. FDNY oral history 9110054, p. 11-12.
21. FDNY oral history 9110461, p. 7-8.
22. FDNY oral history 9110315, p. 3-4.
23. FDNY oral history 9110145, p. 51.
24. FDNY oral history 9110511, p. 2.
25. FDNY oral history 9110191, p. 2.
26. E.g., Charles Gschlecht's interview (FDNY oral history 9110274) by Murray Murad.

## APPENDIX A

### WTC 7 COLLAPSE WARNINGS

- Banaciski, Richard 9110253, p. 6-7  
Burke, Timothy 9110488, p. 17  
Cahill, Joseph 9110085, p. 16-17  
Cassidy, Tiernach 9110413, p. 17 ff.  
Castellano, Pete 9110398, p. 4.  
Charles, Jason 9110486, p. 41  
Cherrington, Andre 9110036, p. 5.  
Congiusta, Frank 9110425, p. 4-5.  
Cook, Louis 9110103, p. 36-37.  
Cruthers, Frank 9110179, p. 8-9.  
David, Roy 9110070, p. 5-6.  
Donato, Thomas 9110471, p. 5-6.  
Drury, James 9110098, p. 10.  
Fellini, Frank 9110217, p. 3.  
Felton, Jarjean 9110041, p. 16.  
Fitzpatrick, Brian 9110256, p. 7-8.  
Fortis, Joseph 9110200, p. 13-15.  
Goldbach, Ray 9110150, p. 13-14.  
Henricksen, John 9110069, p. 4.  
Holzman, George 9110467, p. 8.  
Howe, Kevin 9110469, p. 10.  
Jezycki, Stephen 9110050, p. 8-9.  
Kelty, Eugene 9110261, p. 11-12.  
Kennedy, Edward 9110502, p. 19.  
Long, Matthew 9110021, p. 9-10.  
Lowney, Joseph 9110468, p. 5.  
Mancuso, Anthony 9110271, p. 5.  
Marsilla, Fred 9110399, p. 8.  
Massa, Richard 9110267, p. 5.  
Massa, Vincent 9110222, p. 17 ff.  
McCarthy, Thomas 9110055, p. 10 ff.  
McGlynn, James 9110447, p. 18-19, 29-30  
McGovern, Kevin 9110301, p. 12.  
Mecner, Edward 9110391, p. 11.  
Melarango, William 9110045, p. 7-8.  
Moribito, John 9110354, p. 18.  
Moriarty, David 9110228, p. 11-12.  
Murray, Patrick 9110327, p. 12.  
Muschello, Dominick 9110249, p. 17-18.  
Nigro, Daniel 9110154, p. 10.  
Palone, Michael 9110314, p. 4.  
Piccerill, Steve 9110119, p. 8.  
Pilla, Steven 9110104, p. 13-14.  
Prezant, David 9110212, p. 25-27.  
Quinn, Kevin 9110339, p. 3.  
Rosie, Peter 9110479, p. 6.  
Ryan, William 9110117, p. 15-16.  
Salerno, Anthony 9110309, p. 5-6.  
Scaringello, Patrick 9110030, p. 10.  
Smith, Thomas 9110246, p. 14.  
Sohmer, Robert 9110472, p. 4-5.  
Stroebel, Russ 9110497, p. 5.  
Sweeney, Frank 9110113, p. 14.  
Vasquez, Paul 9110397, p. 5.  
Wallace, James 9110409, p. 4.  
Walsh, James 9110459, p. 18.  
Weindler, Rudolf 9110462, p. 5-7.  
Weldon, Richard 9110307, p. 8.  
Williams, Vandon 9110282, p. 6.  
Wright, DeCosta 9110054, p. 11-12.

## APPENDIX B

### COLLAPSE WARNINGS: ANALYSIS

#### Key:

(1) “Degree of certainty” refers to the degree of certainty that appears to accompany the warning.

U = unknown

D = definite (e.g., “they knew 7 was coming down”; “we waited for 7 to come down”)

I = indefinite (e.g., “they were afraid 7 might come down”)

(2) “Time of warning” refers to the time at which the collapse warning is given.

U = unknown

2- = less than 2 hours before collapse

2+ = 2 or more hours before collapse

4+ = 4 or more hours before collapse

(3) “Whose judgment?” has to do with who made the determination that WTC 7 was at risk of collapse.

U = unknown

S = self (the FDNY member, on the basis of his/her own observation and judgment, has determined that WTC 7 is in danger of collapse)

O = other (the FDNY member, on the basis of the observations and judgments of others, typically superiors, has determined that WTC 7 is in danger of collapse)

(4) “Causes of collapse” refers to the causes of WTC 7’s vulnerability to collapse as stated in the account.

U = unknown

F = fire

D = other damage

*Each of the above classifications may be qualified by the addition of a question mark (e.g., “D?”). This indicates that I am making an estimate based on sketchy information. But note that uncertainties indicated by question marks have been ignored in the final computation of results.*

FDNY member	Degree of certainty	Time of warning	Whose judgment?	Causes of collapse
Banaciski, Richard 9110253	I	2+	O	F + D?
Burke, Timothy 9110488	D	U	O	U
Cahill, Joseph 9110085	D	2-	O	U
Cassidy, Tiernach 9110413	D	U	S	F + D
Castellano, Pete 9110398	I	U	O	U
Charles, Jason 9110486	D	U	O	U
Cherrington, Andre 9110036	I	U	O	F
Congiusta, Frank 9110425	D	2+	O	U
Cook, Louis 9110103	U	2-	O	F
Cruthers, Frank 9110179	D?	2+	U	F + D
David, Roy 9110070	I	2-(?)	O	U
Donato, Thomas 9110471	D?	2- (2+)	O	U
Drury, James 9110098	D	U	U	F
Fellini, Frank 9110217	I	4+	S	F + D
Felton, Jarjean 9110041	I	U	O	F

Fitzpatrick, Brian 9110256	D	U	O	U
Fortis, Joseph 9110200	D	2-	O	U
Goldbach, Ray 9110150	I	2-	O + S	F + D
Henricksen, John 9110069	D	U	O	U
Holzman, George 9110467	I	2-	O	U
Howe, Kevin 9110469	U	2-	O	U
Jezycki, Stephen 9110050	I	U	O	U
Kelty, Eugene 9110261	I	2-(?)	O + S	F
Kennedy, Edward 9110502	D	U	O	U
Long, Matthew 9110021	D?	2-	O	U
Lowney, Joseph 9110468	I	U	O	U
Mancuso, Anthony 9110271	I	4+	O	U
Marsilla, Fred 9110399	I	2-	O	U
Massa, Richard 9110267	I	U	O	F
Massa, Vincent 9110222	D	2+	S?	F
McCarthy,	D	2-	O	F?

Thomas 9110055				
McGlynn, James 9110447	I	2-	S	F
McGovern, Kevin 9110301	I	2+	O	F
Mecner, Edward 9110391	D	U	O	U
Melarango, William 9110045	D	4+	O	U
Moribito, John 9110354	I	U	U	U
Moriarty, David 9110228	D	4+	O	U
Murray, Patrick 9110327	I	4+	O	U
Muschello, Dominick 9110249	D	U	O	U
Nigro, Daniel 9110154	I	2-	S	F + D
Palone, Michael 9110314	I	U	O	U
Piccerill, Steve 9110119	D	U	U	U
Pilla, Steven 9110104	D	U	O?	U
Prezant, David 9110212	I	2-?	O	U
Quinn, Kevin 9110339	D	2+?	O	U
Rosie, Peter 9110479	I	U	O	U
Ryan,	D?	2+	O	F?

William 9110117				
Salerno, Anthony 9110309	I	4+?	O	F?
Scaringello, Patrick 9110030	I	2-	O	F?
Smith, Thomas 9110246	D	2+	O?	U
Sohmer, Robert 9110472	D?	2+	O	F
Stroebel, Russ 9110497	D	U	O	U
Sweeney, Frank 9110113	D	U	O	U
Vasquez, Paul 9110397	D	2-?	O	U
Wallace, James 9110409	D	U	O	U
Walsh, James 9110459	I	U	O	U
Weindler, Rudolf 9110462	I	2+	O	D + F?
Weldon, Richard 9110307	D?	U	U	U
Williams, Vandon 9110282	I	U	O	U
Wright, DeCosta 9110054	D?	U	O	F?
Totals 60	U = 2 D = 31 I = 27	U = 27 2- = 17 2+ = 10 4+ = 6	U = 5 S = 7 O = 50	U = 38 F only = 15 D only = 0 F + D = 7

## APPENDIX C

### THE SEVEN INDEPENDENTS: FDNY Members Who Personally Judged that Seven was Likely to Collapse

Note: I have given these testimonies as I have found them and have not added critique. But I should point out that some of them include speculation that is highly dubious.

(1) Cassidy, Tiernach, 9110413

On p. 17 Cassidy refers to the imminent collapse of WTC 7. Then on p. 19 he continues:

“So, yeah, then we just stayed on Vesey until building seven came down. There was nothing we could do. The flames were coming out of every window of that building from the explosion of the south tower. So then building seven down. When that started coming down, you heard that pancaking sound again.”

On p. 21 ff. the interviewer—almost unique among interviewers in this collection--pursues the issue of Seven’s damage:

Q. “Why was building seven on fire? Was that flaming debris from tower two—“

A. “From tower two.”

Q. “—that fell onto that building and lit it on fire?”

A. “Correct.”

Q. “Because it really got going, that building seven. I saw it late in the day, and like the first seven floors were on fire. It looked like heavy fire on seven floors.”

A. “It was fully engulfed. That whole building—there were pieces of tower two in building seven and the corners of the building missing and whatnot. But just looking up at it from ground level, however many stories it was, 40-some-odd, you could see the flames going straight through from one side of the building to the other. That’s an entire block.”

Q. “I wonder what was burning in there. What do you think was burning. There’s not a lot of wood in there.”

A. “You figure, that jet fuel, that explosion that hit, everything just came out. Remember that explosion? It was massive, that fireball. That jet fuel just—“

Q. “It was jet fuel, yeah. That must have been where it landed. That’s probably where a lot of the jet fuel went.”

A. “A 25,000 gallon tank I think it had?”

Q. “It had to go somewhere.”

(2) Fellini, Frank, 9110217, p. 3

“The major concern at that time at that particular location was number Seven, building number seven, which had taken a big hit from the north tower. When it fell, it ripped steel out from between the third and sixth floors across the façade on Vesey Street. We were concerned that the fires on several floors and the missing steel would result in the

building collapsing. So for the next five or six hours we kept firefighters from working anywhere near that building, which included the whole north side of the World Trade Center complex. Eventually around 5:00 or a little after, building number seven came down.”

(3) Goldbach, Ray, 9110150, p. 13-14

“I then walked down a couple of blocks back to the site. We were north of the Winter Garden at that point. It might have been—it was Vesey Street. We walked all the way back down to Vesey Street. There was a big discussion going on at that point about pulling all of our units out of 7 World Trade Center. Chief Nigro didn’t feel it was worth taking the slightest chance of somebody else getting injured. So at that point we made a decision to take all of our units out of 7 World Trade Center because there was a potential for collapse.”

Q. “It was on fire, correct, Captain?”

A. “Yes, it was on fire at that time. Then they said it suffered some form of structural damage. These things were going on at the same time. The fact that we thought we found Ganci and Feehan and his place at 7 World Trade Center. Made the decision to back everybody away, took all the units and moved them all the way back toward North End Avenue, which is as far I guess west as you could get on Vesey Street, to keep them out of the way.”

(4) Kelty, Eugene, 9110261, p. 11-12

“And 7 World Trade was burning up at the time. We could see it. There was concern. I had gone up to take a look at it, because I knew that the telephone company building, which is 140 West Street, was next to 7 World Trade Center, and there was a concern that if 7 World Trade Center came down, what would happen to this building? We went in there, we checked it out. There were some people in there. We made them evacuate and I went in the back to see what was happening.

The fire at 7 World Trade was working its way from the front of the building northbound to the back of the building. There was no way there could be water put on it, because there was no water in the area. I went back and I reminded whoever the chief was, I don’t know if it was Chief McKavanagh or Chief Blaich, that with 7 World Trade Center in danger of collapsing, you had to be careful, because Con Edison had big transformers in the back that supplied the lower half of Manhattan. ...when I was coming back somewhere around I think it was 5:00 o’clock, 6:00 o’clock, 7 World Trade Center came down.”

(5) Massa, Vincent, 9110222, p. 17-18

“But they weren’t letting guys too close. At this point Seven World Trade Center was going heavy, and they weren’t letting anybody get too close. Everybody was expecting that to come down. We hung out for hours...I remember later on in the day it was getting close that they were more concerned about seven coming down. We had no idea what

was going on on the east side. We were all on our side. On the west side it was pretty clear. The wind was blowing from west to east I believe. I remember later on in the day as we were waiting for seven to come down they kept backing us up Vesey, almost a full block. They were concerned about seven coming down, and they kept changing us, establishing a collapse zone and backing us up.

....

The whole time while we were waiting—there were hours that went by. Seven came down after 5 in the afternoon.”

(6) Nigro, Daniel, 9110154, p. 10

“The most important operational decision to be made that afternoon was the collapse had damaged 7 World Trade Center, which is about a 50 story building, at Vesey between West Broadway and Washington Street. It had very heavy fire on many floors and I ordered the evacuation of an area sufficient around to protect our members, so we had to give up some rescue operations that were going on at the time and back the people away far enough so that if 7 World Trade did collapse, we wouldn’t lose any more people. We continued to operate on what we could from that distance and approximately an hour and a half after that order was given, at 5:30 in the afternoon, 7 World Trade Center collapsed completely.”

(7) McGlynn, James, 9110447, p. 29-30

“Just when you thought it was over, you’re walking by this building and you’re hearing this building creak and fully involved in flames. It’s like, is it coming down next? Sure enough, about half an hour later it came down.”

## APPENDIX D

### WITNESSES WHO WERE STUNNED BY TOTAL COLLAPSE BUT MIGHT HAVE ACCEPTED DIFFERENT, LESSER FORMS OF COLLAPSE (EXAMPLES)

(1) McGlynn, James, 9110447, p. 8

"Any time I've heard of a collapse, it was never an entire building like this turned out to be."

(2) Murray, Patrick, 9110327, p. 16- 17

"Early on, looking at the buildings, my personal belief, my personal immediate belief was that the top of the building was going to slide off of the south tower because damage that the plane did, it looked like it took out half the building on a number of floors, on multiple floors. But it was a fleeting thought. I don't think anybody there believed in their heart that that building was going to collapse, even that the top would come off. But I don't think anybody believed that that building was going to collapse the way it did."

(3) Carletti, Richard, 9110419, p. 4

"I turned to Tommy and I said, Tommy, this building is in danger of collapse. In my opinion, I didn't think there was going to be a catastrophic collapse..."

(4) Chiafari, Joseph (Lieutenant), 9110215, p. 14

"I was thinking in my mind, gee, if the thing was going to collapse, how it was going to weaken itself, most likely where it's burning at, it's most likely going to tip over and the remainder of the structure is almost going to like remain intact, so you had a good amount of like 20 or 30 floors that would maybe tip over on its side."

(5) Cooke, Alan, 9110040, p. 4

"I heard a rumble. Both of us looked up and we saw a part of the building. I saw a part of the building coming down. I had thought it was just one piece of the building coming down. I didn't in my imagination didn't think it was the entire building coming down."

(6) DeMarco, Diane, 9110331, p. 8

"I saw the antenna start to slide, but we thought at that point that it was going to topple over, not go straight down."

(7) Delgado, Manuel, 9110004, p. 15

"It was tilting towards us, so it had been to be tilting eastward."

Q. "East?"

A. "Maybe southeast...At that point we hear the rumble and, you know, this is it. I figure I'm dead. I thought this tower was going to topple."

(8) Dixon, Brian (Battalion Chief), 9110166,

p. 15-16

"The realization hit that it's going to fall down, the top's coming off. I was still thinking--there was never a thought that this whole thing is coming down. I thought that that blew out and stuff is starting to fly down. The top is going to topple off there."

p. 19

"But I went back up and peered out. I'm expecting to look up and see that the top of the building fell into the street.

I look and what I see is about 20 stories left of a building and jagged edges on the south side. I was like 20 stories, maybe, or so and on the north side of that tower down to about maybe 10 or 15 stories on the south side of it.

It's like I can't believe the whole building is down. I was dumbfounded."

(9) Grabher, Steve (Chief), 9110241, p. 11

"The whole top was teetering, and I really thought just the top of the building was falling off."

(10) Guidetti, Pete, 9110084, p. 25

"In me saying that these buildings are coming down, I thought it was going to collapse, it was going to topple."

Q. "From above?"

A. "From above, like 30 stories, 20. Whatever was left above the plane crash in either tower would just give way and go this way and come down into the street. I did not think the whole building would pancake down."

See also, Supervising Fire Marshall Robert Byrnes, 9110206, p. 5-6 and Lieutenant Michael Cahill, 9110143, p. 7.

## APPENDIX E

### WITNESSES WHO WERE TOLD PLANES COULD NOT BRING DOWN THE TOWERS (EXAMPLES, EXCLUDING PERUGGIA)

(1) Gribbon, Frank (Deputy Commissioner), 9110167, p. 21

"The one thing, I talked to Ray Goldbach and Tom Fitzpatrick when I got there and I looked up at them and I said do we have a collapse potential here. I remember them saying no, they are made to withstand a hit from planes."

(2) Guidetti, Pete, 9110084, p. 23-26

"About 20 years ago when I was full duty...It was a Friday night. I'll never forget this....I'm standing in front of quarters. It's the 12 to 3 watch, summer night, beautiful night. A civilian is walking by, stop, he's looking in, the apparatus doors are up. I start talking to him. He turns out to be an architectural engineer. He builds high-rise buildings, skyscrapers.

I said, 'Let me ask you a question. Can I ask you a question?' He said, 'Yeah, sure.' I said, 'The World Trade Center—' He says, 'Yes.' These are my words, Kevin, on my father's grave and my mother's grave. I said, 'Let me ask you a question. If a 747 out of Newark topped off with jet fuel crashes into the 80th story of one of the stories, will it topple the top 30 stories?' 'Oh, no, it's not designed to do that. It's not designed to do that the way we constructed this. We took things like that into consideration in the building of it. That would not happen'...At that time when I ask this guy this question, I'm picturing a plane going in, blowing out loads of floors, fully loaded, 747 I quoted, topped off with jet fuel, would it topple the 30 stories. He said no...He didn't turn around and say, 'Oh, no, you don't have to worry about the building toppling. However, you have a strong possibility of it pancaking down on itself because it's primarily steel construction'...But again, he didn't say that. He just said it's not coming down."

(3) Moribito, John, 9110354, p. 11

"I felt the building shake. I saw the lights flicker. At that point, I started to get nervous and wonder whether or not the buildings would come down.

I approached the chiefs. The chiefs were assured by the engineers of the building that there was no way that the buildings would come down. They actually said that the buildings could take--withstand ten airplanes hitting it, and there was no way that the buildings could come down."

(4) Prezant, David (Deputy Chief Medical Officer), 9110212, p. 3

"At that time no firefighters had been injured. The building had not collapsed. I remember overhearing several Chiefs saying that a collapse was not possible."