

National Institute of Standards and Technology
National Construction Safety Team Investigative Study of the June 24, 2021
Champlain Towers South Condominium Collapse in Surfside, FL
OMB Control # XXXX-XXXX
Expiration Date XX/XX/XXXX

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SEMI-STRUCTURED INTERVIEW INSTRUMENT

Section 1: Contact and Demographic Information

1.1 What is your name?

1.2 In case we have any follow-up questions, could you please provide both a phone number and email address?

a. phone number:

b. email address:

Section 2: Instrument Section Assignment

[With information from the following question, respondents shall be asked to complete only the sections applicable to them.]

2.1 We'd like to begin the interview by understanding your standpoint in this event. Please identify which of the following categories best applies to you: (Select all that apply)

- a. Evacuee of Champlain Tower South (Section 3)
- b. Witness to collapse (Section 4)
- c. Resident at Champlain Towers South (Section 5)
- d. Owner at Champlain Towers South (Section 6)

- e. Resident at Champlain Towers North (Section 7)
- f. Owner at Champlain Towers North (Section 8)
- g. Vendor, Construction Worker, Contractor, or Building Maintenance Staff at Champlain Towers South (Section 9)
- h. Engineer (Section 10)
- i. Champlain Towers South Condo Board Member (Section 11)
- j. First Responder (includes search and rescue workers) (Section 12)
- k. Government Official (includes Surfside, Miami-Dade, or Florida Government) (Section 13)

Prompt: Okay, thank you. The next series of questions will inquire about your experience or knowledge of the collapse and/or building based on your standpoint.

Section 3: Questions for Evacuees of Champlain Towers South

3.1 Were you a resident of Champlain Towers South at the time of the collapse?

- a. Yes [If Y: make sure that you ALSO ASK the resident Qs]
- b. No [If N: How long had you been visiting at the time of the collapse? ____ min. /hr/days]

3.2 Please tell me about your experience with the emergency situation before, during, and after the building collapse.

3.3 Did you experience physical indications of the emergency? Please describe.

3.4 Did you experience social indications of the emergency? Please describe any formal or informal communications received. (for example, communications received or informational milling)

3.5 Do you recall what prompted you to leave the building? Please walk me through the experience and what you saw and heard.

3.6 Did you see anything you believe may be relevant to the failure of the Champlain Building South?

- a. Yes [If Y, please tell us about your experience]
- b. No

3.7 Might you have photos or other information from the time just before, during, or after the collapse? [Interviewer: Collect now or provide Portal info.]

3.8 Please describe your awareness of surroundings during evacuation (e.g., potential hazards encountered).

3.9 Please tell me if you noticed any of the following at any time during your evacuation? (Follow up with questions that get descriptions for both inside and outside, such as seeing: smoke, fire, water, sprinklers, etc.)

3.10 Prior to the building's collapse, what was your knowledge of the building's condition or safety? Did you feel that the building's safety was being maintained appropriately?

3.11 Based on your experience as an evacuee, did you see anything you believe may have contributed to, or is relevant to, the failure of Champlain Towers South: yes or no? If yes, can you please describe?

Section 4: Questions for Witnesses to Collapse

4.1 Can you please describe your association with Champlain Towers South (resident, neighbor, etc.)?

4.2 Are you a Surfside local?

4.3 At the time of the building collapse, please describe to the best of your ability where you were.

4.4. At the time of the building collapse, can you describe what you heard?

4.5 At the time of the building collapse, can you describe what you saw?

4.6 At the time of the building collapse, can you describe what you physically felt?

4.7 At the time of the building collapse, can you describe what you smelled?

4.8 At the time of the building collapse, please describe the extent of your understanding of what was happening at the moment? What made you think that?

4.9 At the time of the building collapse, can you describe the timing of what you witnessed? For example, was there a series of events that stands out in your mind?

4.10 Can you to the best of your ability describe the sequence of events leading to and during building collapse (e.g., pool deck failure, garage collapse, building movement, etc.)?

4.11 Prior to the building collapse, did you perceive the building as safe? Was there any indication that it was unsafe?

4.12 Based on your experience as a witness, did you see anything you believe may have contributed to, or is relevant to, the failure of Champlain Towers South: yes or no? If yes, can you please describe?

Section 5: Questions for Residents of Champlain Towers South

5.1 Tenure in building (skip if previously answered)

- How many years had you lived in the building?
- [OR] Please indicate which month and year you moved into Champlain Towers South: month _____ year _____

5.2 Knowledge of building condition (skip if previously answered)

- Prior to the building's collapse what did you know about the building's condition?
- Please tell me about your knowledge of previously completed work on the building.
- Please tell me about your knowledge of planned work and work recommended in the inspection reports.
- Ahead of the collapse, what did you understand about the work that was planned? What needed to be updated? Did you understand whether this was needed for the structural safety of the building?

5.3 Details of experiences during construction work in the area

- Please describe your experiences during construction work in the surrounding area. For example, think about work done on neighboring buildings and how that impacted or did not impact your place of residence.
- Please describe your experiences with any construction or maintenance work on the Champlain Towers South.

5.4 Prior to the collapse, did you have any indications that something was wrong with the building? [Probe: This could be for your own living space, neighbors living spaces, or the communal areas of the building.]

- [If Y, Please describe to the best of your ability areas in the building (e.g., garage or pool deck, etc.) where you saw signs of weakness in or damage to the building?

5.5 Prior to the collapse, can you please describe any experience you had with structural concerns about the building? [Probe: This could be for your own living space, neighbors' living spaces, or the communal areas of the building.]

- [if Y, did you report these issues or might you have photos of failing components in the weeks or days leading to the collapse? Interviewer: Collect now or provide Portal info.]

5.6 Did you see anything you believe may be relevant to the failure of the Champlain Building South? If so, can you please describe? Prior to the collapse, how would you describe the culture of safety in the building?

5.7 Please describe any work that was done to the residence that may have related to structural changes prior to the collapse.

5.8 Based on your experience as a resident at Champlain Towers South, did you see anything you believe may have contributed to, or is relevant to, the failure of Champlain Towers South: yes or no? If yes, can you please describe?

Section 6: Questions for Owners of Champlain Towers South

This section is geared only towards those that may own, but do not live in, CTS.

6.1 Please indicate which month and year you bought a residence in Champlain Towers South: month _____ year _____

- Did you live in this residence at any point during your ownership? Y/N
- Please indicate the period for which you have rented your property: state (MONTH/YEAR) -- end (MONTH/YEAR)

6.2 Please tell me about your knowledge of previously completed work on the building, planned work, and work recommended in the inspection reports.

- Please tell me about your knowledge of planned work and work recommended in the inspection reports.

6.3 Ahead of the collapse what was your opinion of the planned work? (Please note that the planned work is what you understood needed to be updated)

6.4 Prior to the collapse, did you have any indications that something was wrong with the building? [Probe: This could be for your own living space, neighbors' living spaces, or the communal areas of the building.]

- [If Y, Please describe to the best of your ability areas in the building (e.g., garage or pool deck, etc.) where you saw signs of weakness in or damage to the building?

6.5 Prior to the collapse, please describe any experience you had with structural concerns about the building. [Probe: This could be for the living space you own, neighbors' living spaces, or the communal areas of the building.]

- [if Y, did you report these issues or might you have photos of failing components in the weeks or days leading to the collapse? Interviewer: Collect now or provide Portal info.]

6.6 Please describe any work you had done to the residence that may have related to structural changes prior to the collapse.

6.7 Based on your experience as an owner at Champlain Towers South, did you see anything you believe may have contributed to, or is relevant to, the failure of Champlain Towers South: yes or no? If yes, can you please describe?

Section 7: Questions for Residents of Champlain Towers North

7.1 Do you own or rent your residence? own/rent

7.2 Do you reside in Champlain Towers North?

7.3 Please indicate which month and year you moved into the building: month ____ year ____

7.4 Please tell me about your knowledge of previously completed work on Champlain Towers South and planned work at the time of the collapse.

7.5 Prior to the collapse, how would you describe the culture of safety in Champlain Towers North?

7.6 Have your thoughts on safety in your building changed since the collapse? How?

- Please tell me about your knowledge of previously completed work on Champlain Towers North and planned work at the time of the collapse.
- Please tell me about your experience with the emergency situation before, during, and after the collapse of Champlain Towers South.
 - Did you experience physical indications of the emergency? Please describe.
 - Did you experience social indications of the emergency? Please describe any formal or informal communications received.
 - Communication messages received
 - Information milling

- Did you see anything you believe may be relevant to the failure of the Champlain Building South? Y/N
- [If Y, please tell us about your experience]

7.7 Might you have photos or other information from the time just before, during, or after the collapse? [Interviewer: Collect now or provide Portal info.]

7.8 Based on your experience as a resident of Champlain Towers North, did you see anything you believe may have contributed to, or is relevant to, the failure of Champlain Towers South: yes or no? If yes, can you please describe?

Section 8: Questions for Owners of Champlain Towers North

This section is geared only towards those that may own, but do not live in, CTS.

8.1 Please indicate which month and year you bought a residence in Champlain Towers North: month _____ year _____

- Did you live in this residence at any point during your ownership? Y/N
- Please indicate the period for which you have rented your property: state (MONTH/YEAR) -- end (MONTH/YEAR)

8.2 Please tell me about your knowledge of previously completed work on the building, planned work, and work recommended in the inspection reports.

- Please tell me about your knowledge of planned work and work recommended in the inspection reports.

8.3 Ahead of the collapse what was your opinion of the planned work? (Please note that the planned work is what you understood needed to be updated)

8.4 Prior to the collapse, did you have any indications that something was wrong with the building? [Probe: This could be for your own living space, neighbors' living spaces, or the communal areas of the building.]

- [if Y, Please describe to the best of your ability areas in the building (e.g., garage or pool deck, etc.) where you saw signs of weakness in or damage to the building?]

8.5 Prior to the collapse, please describe any experience you had with structural concerns about the building. [Probe: This could be for the living space you own, neighbors' living spaces, or the communal areas of the building.]

- [if Y, did you report these issues or might you have photos of failing components in the weeks or days leading to the collapse? Interviewer: Collect now or provide Portal info.]

8.6 Please describe any work you had done to the residence that may have related to structural changes prior to the collapse.

8.7 Did you see anything you believe may be relevant to the failure of the Champlain Building South? Y/N

8.8 Based on your experience as an owner at Champlain Towers North, did you see anything you believe may have contributed to, or is relevant to, the failure of Champlain Towers South: yes or no? If yes, can you please describe?

Section 9: Questions for Maintenance/ Service Vendors, Construction Workers, Contractors, and Building Maintenance Staff of Champlain Towers South prior to collapse

9.1 Could you please provide your employer's name, your job title, and your area of skill or expertise?

9.2 Can you please describe the work or service you performed or proposed at Champlain Towers South?

9.3 When did you first start work at the building, and how long and often have you worked there? When was the last time you were at the building?

9.4 At the time you first started working at Champlain Towers South, what did you think of the building's condition in general, and with regard to safety?

9.5 At the time you were most recently at Champlain Towers South, what did you think about the building's condition in general, and with regard to safety? If there were significant differences, can you please describe what those were, and if you have any thoughts on why?

Prompt: We will now ask about specific areas and items around the building to get a better sense of its condition. If you feel you are not able to answer some of these questions, please just let us know.

9.6 Were you aware of any building maintenance issues, damages, or failures because of your individual observations working at the site? If yes, please describe location, extent, and impact.

9.7 Were you aware of any building maintenance issues, damages, or failures because someone else at the building (or with knowledge of the building) told you about them? If yes, please describe the location, extent, and impact of these issues.

9.8 Did you see any of the following: preparatory work for repairs (bracing), staging of materials/equipment for renovation, or ongoing or completed maintenance or repairs? Please describe all that apply.

9.9 Were you aware of any ongoing site monitoring for the following concerns? If so, could you please provide your insights on these issues to the best of your ability?

- corrosion and spalling
- crack growth
- cracks or vibration from/during nearby construction
- drainage, flooding, or water intrusion
- other

9.10 Were you involved in any structural assessment at Champlain Towers South? If so, can you please provide details regarding each topic below?

- geotechnical and foundation issues
 - subsidence
 - floor and wall deflections or cracking
- structural frame issues
 - corrosion and spalling
 - cracks, settlement, deflections
 - repairs
 - maintenance
- water management
 - pool deck and other building areas
 - parking and subgrade levels
 - any issues with surge, waves, groundwater

9.11 Based on your experience as (*JOB TITLE*), did you see anything you believe may have contributed to, or is relevant to, the failure of Champlain Towers South: yes or no? If yes, can you please describe?

Section 10: Questions for Engineers

10.1 Could you please provide your employer's name, your job title, and your area of skill or expertise?

10.2 Can you please describe the work or service you performed or proposed at Champlain Towers South?

10.3 When did you first start work at the building, and how long and often have you worked there? When was the last time you were at the building?

10.4 At the time you first started working at Champlain Towers South, what did you think of the building's condition in general, and with regard to safety?

10.5 At the time you were most recently at Champlain Towers South, what did you think about the building's condition in general, and with regard to safety? If there were significant differences, can you please describe what those were, and if you have any thoughts on why?

Prompt: We will now ask about specific areas and items around the building to get a better sense of its condition. If you feel you are not able to answer some of these questions, please just let us know.

10.6 Were you aware of any building maintenance issues, damages, or failures because of your individual observations working at the site? If yes, please describe location, extent, and impact.

10.7 Were you aware of any building maintenance issues, damages, or failures because someone else at the building (or with knowledge of the building) told you about them? If yes, please describe the location, extent, and impact of these issues.

10.8 Did you see any of the following: preparatory work for repairs (bracing), staging of materials/equipment for renovation, or ongoing or completed maintenance or repairs? Please describe all that apply.

10.9 Were you aware of any ongoing site monitoring for the following concerns? If so, could you please provide your insights on these issues to the best of your ability?

- corrosion and spalling
- crack growth
- cracks or vibration from/during nearby construction
- drainage, flooding, or water intrusion
- other

10.10 Were you involved in any structural assessment at Champlain Towers South? If so, can you please provide details regarding each topic below?

- geotechnical and foundation issues
 - subsidence
 - floor and wall deflections or cracking
- structural frame issues
 - corrosion and spalling
 - cracks, settlement, deflections

- repairs
- maintenance
- water management
 - pool deck and other building areas
 - parking and subgrade levels
 - any issues with surge, waves, groundwater

10.11 Based on your experience as (*JOB TITLE*), did you see anything you believe may have contributed to, or is relevant to, the failure of Champlain Towers South: yes or no? If yes, can you please describe?

Section 11: Questions for Champlain Towers South Condo Board Members

11. 1 Can you please describe your role and responsibilities as a Condo Board Member for Champlain Towers? How long have you served in this role?

11.2 How would you describe the Champlain Towers building condition over the years and at the time of the collapse?

11.3 How would you describe the culture of safety at the Champlain Towers?

11.4 What indications of building failure might there have been over the years?

11.5 Did you see anything you believe may have contributed to, or is relevant to, the failure of Champlain Towers South: yes or no? If yes, can you please describe?

11.6 Based on your experience as a Condo Board Member, did you see anything you believe may have contributed to, or is relevant to, the failure of Champlain Towers South: yes or no? If yes, can you please describe?

Section 12: Questions for First Responders

12.1 Could you please provide us with your employer’s name, your job title, and your area of skill or expertise?

12.2 Can you please describe your role in responding to Champlain Towers South?

12.3 To the best of your recollection, what time were you first deployed to the scene? What time did you arrive at the scene?

12.4 What processes or protocols did you follow upon arrival?

12.5 On the scene, what were your first perceptions? What might have stood out to you about this event that was perhaps different from others for which you have served?

12.6 What challenges did you experience in responding to this crisis?

12.7 What might be helpful about responding to events of this nature in the future?

12.8 Based on your experience as a First Responder, did you see anything you believe may have contributed to, or is relevant to, the failure of Champlain Towers South: yes or no? If yes, can you please describe?

Section 13: Questions for Surfside, Miami-Dade, or Florida Government Officials

13.1 Could you please provide us with your employer's name, your job title, and your area of skill or expertise?

13.2 Can you please describe your agency's roles and responsibilities in regard to building safety throughout a building's lifecycle?

13.3 Before the collapse, what is your perception of the safety of Champlain Towers South?

13.4 Can you please describe your role in responding to the crisis?

13.5 What are the typical response protocols for an event of this nature? Were these protocols useful during the actual response to this crisis?

13.6 Could you please describe the entities or parties involved in responding to this crisis and how those entities coordinated their response protocols?

13.7 What challenges did you experience in responding to this crisis?

13.8 As you were trying to make sense of unfolding events, what messages did you *receive* about this crisis that were helpful in understanding what was happening?

13.9 As you were trying to make sense of unfolding events, please tell us what messages you may have *sought and shared* with others. In particular:

- What messages did you seek from or share with the public?
- What messages did you seek from or share with news reporters?
- What messages did you seek from or share with stakeholders (e.g., police, first responders, condo affiliates, engineers, etc)?

13.10 What role did social media play in understanding unfolding events? How did you utilize social media throughout the crisis to both seek information and share information with others?

13.11 In the future, what information might be helpful from engineers and other technical experts regarding crises of this nature?

13.12 In the future, what forms of collaboration would you like to see between local government and engineers and other technical experts when handling crises of this nature? Is there anything that could have made the response better or more efficient?

13.13 What might be helpful about responding to events of this nature in the future?

13.14 Based on your experience as a Government Representative, did you see anything you believe may have contributed to, or is relevant to, the failure of Champlain Towers South: yes or no? If yes, can you please describe?

Section 14: Conclude

14.1 Is there anything we may not have asked you that you think may be important for us to know?

14.2 We welcome submissions of data including photos, video and other documentation associated with a disaster or failure event from the general public and other stakeholders. Do you have any photos, videos, or other information about the building that you would like to share with us?

14.3 Are there any other people you think might be important to talk with? Could you provide us with their contact information?

Those are all the questions we have. The valuable information you provided will help designers and engineers improve building safety. Thank you so much for taking the time to talk with me.

Privacy Act Statement

Authority: The National Institute of Standards and Technology Act, as amended, 15 U.S.C. 271 et seq. (which includes Title 15 U.S.C. 272) and section 12 of the Stevenson-Wydler Technology Innovation Act of 1980, as amended, 15 U.S.C. 3710a.

National Construction Safety Team (NCST) Act (Public Law 107-231)

Purpose: NIST is conducting a full technical investigation of the collapse of the Champlain Towers South Condominium in Surfside, FL that occurred on June 24, 2021, under the authority of the National

Construction Safety Team (NCST) Act, which is authorized by Congress. As part of this work, NIST seeks to interview eyewitnesses, first responders, engineers, vendors, contractors, maintenance staff, construction workers, residents, condominium owners, government officials, and others who can describe experiences with the building before and/or during the collapse, describe knowledge of the building prior to the collapse (e.g., construction, maintenance), and generally, provide any additional information that may help explain the technical cause of the building failure.

Routine Uses: NIST will use this information to conduct investigations and research to determine the technical cause of the collapse and, if appropriate, to recommend changes to building codes, standards and practices, or other actions to improve the structural safety of buildings. Disclosure of this information is also subject to all the published routine uses as identified in the Privacy Act System of Records Notice NIST-6: Participants in Experiments, Studies, and Surveys.

Disclosure: When you agree to participate in an interview, you are indicating your voluntary consent for NIST to use the information you provide for the purpose stated.