New York: The Center of the World, a Documentary Film
Transcript

NARRATOR: For nearly 400 years -- ever since the soft September morning in 1609 when Henry Hudson first steered his ship into the shimmering green waters of the upper bay -- New York's destiny had been inextricably connected to other parts of the globe.

Founded by the Dutch as a remote outpost in a worldwide network of trading colonies, it had moved in the course of its first 300 years from the far edge of empire to the very center of the world.

Rising to greatness as America itself rose to greatness in the course of the 19th century -- gathering in money and peoples from around the country and around the world -- it had emerged by the dawn of the 20th century as the unofficial capital, and supreme laboratory, of a new kind of mixed and cosmopolitan culture.

In the century to come -- reaching higher and projecting farther than any other city on earth -- it had become the epicenter of a new kind of global economic order -- restlessly pushing itself out across the world -- until the skyline of New York had become one of the most powerful and instantly recognizable symbols on the face of the planet.

And yet -- in ways that would become fully apparent only in hindsight -- by the dawn of the 21st century New York had also emerged as one of the most strangely paradoxical cities on earth -- at once bewilderingly diverse and cosmopolitan -- and yet in many ways, surprisingly insular and inward-looking -- as if the process of globalization had mainly meant gathering in the world's peoples and riches -- without involvement in the world's deep conflicts and divisions.

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Niall Ferguson, Historian & Professor of History, New York University: Well, I think the experience of globalization, for Americans and particularly for New Yorkers, was very lopsided. They thought they could have the benefits of a globalized economy and none of the costs. They thought you could globalize economics but not politics, not violence. And in a sense, that the tools of globalization -- the skyscrapers, jets -- could only be used for benign purposes. The notion that these tools could be used for destruction in the pursuit of extreme ideological objectives -- specifically anti-American, anti-global objectives -- had dawned, I think, to relatively few people and so it came as literally a bolt from the blue when it happened.

NARRATOR: Though it would be fully apparent to most Americans only after the great towers had fallen, to a remarkable degree the paradox of globalization would be seen in retrospect to have come to a mighty culmination in the twin towers of the World Trade Center -- whose extraordinary 50 year history had, it turned out, embodied every theme and issue -- every tension and value -- every paradox and contradiction -- of New York's long and complex 400 year march to the center of the world.

Reader, *Timothy Garton Ash, April 9th, 2002:* America is part of everyone's imaginative life -- through movies, music, television and the web -- whether you grow up in Bilbao, Beijing or Bombay. Everyone has a New York in their heads, even if they have never been there -- which is why the destruction of the twin towers had such an impact.

Philippe Petit, High Wire Artist: My love for the towers was in my relation with them -- not as an overall appreciation almost in an architectural sense: my love was for their life they were alive. Not many people know that. The people who build them know that. They were vibrating with the passage of a cloud over the sun, difference of temperature, the wind. And the skeleton was actually making noise. I discovered that. And at times the towers were asleep, hibernating. And at times they wake up and they cry and they almost -- yell for help. I think I loved them from the inside. I didn't find them beautiful and interesting at first sight.

But as I get to know them -- as I found out that to build those two monolith you had to had a group of insane designer -- architect -- structural engineer -- builders, hundreds of them for years it became something to love. I love their strength and their arrogance, somehow. They were so overlooking the skyline of New York. Somehow anything that is giant and manmade strikes me in an awesome way and calls me. And I cannot see the highest towers being built without wanting to celebrate their birth, right there.

NARRATOR: For nearly 30 years, they stood at the foot of Lower Manhattan -- two of the tallest and most instantly recognizable structures on earth, rising at the heart of the most ravishing and well-known skyline in the world -- the mightiest and most ambivalent monuments of their age -- and, in the end, the most tragic.

Conceived in the giddy aftermath of World War Two -- and rising as America itself rose to global power in the decades following the war -- they were destined to become the real and symbolic epicenter of an economic system that would come to dominate much of the face of the planet.

More than any other structures of the age, they would be intimately bound up from start to finish with the awesome forces reshaping New York in the second half of the 20th century -- and with the even greater forces propelling America itself relentlessly upward -- and ever outward -- across an increasingly complex and interconnected globe.

Paul Goldberger, Architecture Critic: There was a real sort of magnetic pull that these buildings had around the world. And certainly, they were a very convenient symbol for those who would want to destroy us, of capitalism, of the American system, of the 20th century, of modernity, of all of those things. And more than any symbol in America, they said to the world not just, "This is America," but, "This is a modern place. This is a place of the 20th century." And that made them, I think, a very potent target in a whole different way.

Pete Hamill, Writer: The event was not a strike just at New York. It was at the heart of New York. It was the place that was the womb of this city. It's where this city was born. That bunch of acres at the tip of Manhattan. That thing holds all our history, everything down there. There's a kind of template that was cut geographically by the Dutch and the English that still exists to this day. It was the city that made all the rest of the city possible. The genius that accumulated, impacted and collided in those streets, that handful of streets below Chambers Street, was the city that created the imagination to first go up, to make a vertical city out of a horizontal city. So that when they hit that, they hit where our civilization began. Civilization comes from the same root as civic and as city. It's a thing that happens in cities. And they came smashing into it, vandalizing it.

NARRATOR: Like almost all great skyscrapers, it was fated to be a structure at once of its time and yet, partly for that reason, poignantly out of time, too -- rising at the very end of a great building boom, on the cusp of great change.

Raised into the sky during one of the most tumultuous and complex periods in the city's history -- by a unique combination of pride, ambition, audacity, greed, idealism, ingenuity and folly -- the colossal towers were in many ways the last of their kind, and a mighty culmination -- the stunning climax of more than 70 years of building tall on the island of Manhattan -- and the last and most controversial of the massive urban renewal projects that would transform New York during the postwar period.

The effort it would take just to get them off the ground -- to say nothing of raising the two largest structures in the world more than a quarter of a mile into the sky -- from the tangled streets of the most densely concentrated business district on earth -- would require the greatest convergence of public and private power the city had ever seen -- and embroil their builders in every conflict and tension of the age.

James Glanz, New York Times Reporter: I think you should think of the two towers as in one sense the moon shot of structural engineering and skyscraper construction. They were unprecedented in the same way that the NASA program -- the Apollo program -- was, in virtually the same era. And they had similar ambitions. Just in terms of quantity, they were the biggest. They were 10 million square feet of space. Nothing had come remotely close to that number in terms of the amount of real estate in one complex. They were the tallest. They were going to have to resist the forces of the wind and gravity in a way that was of a magnitude far greater than anything that had been done before. I mean, you often see projects that are audacious on a technical level, on a political level, on a human level. This project was audacious on all those levels. It was sort of a multidimensional exercise in hubris, you might say. In some ways, I think they overreached. But that's the nature of the game when you're talking about audacity and hubris. And in that sense, you just have to say, these things were wonders of the world. And we shall not see their like again.

NARRATOR: In the end, the extraordinary 50 year saga of the World Trade Center -- when and why it was built, how and where it went up, what its great towers stood for, and how and why they fell -- would tell more than most people had ever imagined about the city and country that was their home -- embodying along the way the highest hopes and deepest contradictions of New York's century-long push into the sky -- and of America's astonishing 50 year expansion around the globe.

Kenneth T. Jackson, Historian: Well, ironically, as important as the World Trade Center was for those 30 years that it existed, or almost 30 years -- massive building, 50,000 people in it working -- in some ways it's more important to history now that it's gone. It was significant. But it's a world event in its absence. The interest, the focus of the world, and there may be wars that will happen from it. Millions and hundreds of millions of people around the world are changing the way they live because of what happened at the World Trade Center.

Leslie Robertson, Engineer: The city lost so much. I think the experience that so many people had of watching, either on the television or in the flesh, has caused so much pain in the city of New York. Everyone knows somebody who died; everyone does. And from all walks of life. Poor people and rich people, executives and office boys, all walks of life. And that's what it lost.

Ada Louise Huxtable, Architecture Critic: We know what they stood for. We know that they stood for something that made them vulnerable to the most horrible fate. And certainly they were a symbol of something dreadful to the people who blew them up. But New Yorkers found it a symbol of New York, the New York they love. And I think that has made this terrible catastrophe even worse to bear.

NARRATOR: From start to finish the story of the World Trade Center would be an extraordinary parable of American power -- a parable of the forces reshaping New York in the postwar period -- and of those the forces reshaping the globe.

James Glanz, New York Times Reporter: It wasn't about consensus back in those days. It was about a very powerful agency knowing how to get its way, busting through all obstacles, all objections, no matter how valid. And that's just the way it worked. It's just the way things got done back then. It's the end of the era of great building, in a way. It's still a time when, even in a complicated municipality like New York, you can pull off a project like that, and you can do it the way you want to do it.

Eric Lipton, New York Times Reporter: This was the last great project, I think, of that scale for New York City, and you know, nothing has happened like it since and probably won't again. It just is a different era which the public participates much more in choosing the fate of New York, and not just this small group of men in a back room that are deciding that they want to do something.

NARRATOR: The idea was born in the triumphant months following the end of World War Two -- as a new global order based on free and open trade began to emerge from the chaos of war -- and as New York itself emerged for the first time as the undisputed capital of the world.

Niall Ferguson, Historian & Professor of History, New York University: Well, 1945 was the end of a period of commercial catastrophe, a period in which trade between the great economies of the world had all but collapsed. And the lesson that American policy makers drew from the disasters of the 1930s and 1940s was very straightforward: The United States must commit itself to the creation of a global free trade order which would ensure the prosperity of the United States but also rapid economic growth in the economies of America's principal allies. So after the Second World War you have the creation of trade, monetary, diplomatic, and military institutions, all fundamentally designed to maintain an open free trading world economy.

NARRATOR: In the fall of 1946 -- as delegates to the brand new United Nations settled on a site in midtown for their new home -- leaders in New York first proposed building an immense new complex in the heart of Lower Manhattan -- a "world trade center," that would exploit the anticipated postwar explosion in international trade, and affirm New York's newfound pre-eminence within a vast and growing global empire.

Mike Wallace, Historian: The idea was to have a trade mart here that, by setting up big exhibit centers and inviting people from around the world to come and see their goods and their wares, it would further the interests of a growing world trade. And with that in mind the state legislature assigned to Winthrop Aldrich, the head of Chase Bank, a "world trade center" organization.

Eric Lipton, New York Times Reporter: Ultimately the idea of a complex of buildings that they would call the World Trade Center got thrown out, because the port interests were still of such clout at that time that they were able to say, "If you're going to spend money, you're

going to build new piers." But by the time David Rockefeller rises and replaces his uncle Winthrop Aldrich as the chief executive at Chase, it's a different place, New York, and the port is already on its way out. And something needs to happen in Lower Manhattan if it's going to regain the status that it once held as the world's financial center and that it was losing.

NARRATOR: It would take more than a decade for the idea of the World Trade Center to begin to get off the ground -- and four decades more to fulfill the lofty promise of its name. When it did begin to take hold, however, in the late 1950s, it would be set in motion to a remarkable degree by just two men -- sons and brothers of one of the most powerful family dynasties on earth -- who would seize upon the idea not only as a glorious symbol of world trade, but as the centerpiece of one of the most controversial and daring real estate gambles in the history of New York City -- the effort to save Lower Manhattan, which less than 10 years after the end of the war had been sent spiraling into a period of steep decline not only by the waning of the port, but by an alarming exodus of businesses to the middle of the island.

Guy Tozzoli, President, World Trade Center Association: Lower Manhattan, which I'll describe as the two square miles from Chambers Street down to the Battery, was dying. Companies were moving out, either to mid-Manhattan or really out of New York City. The only new building built since World War Two was the Chase Manhattan building. And David Rockefeller was then the chairman of the Chase Manhattan Bank. And so David had an idea. Why not create, using the Port Authority of New York and New Jersey, a "world trade center" -- whatever that was.

Carol Willis, Historian: There are different opinions about the role and the motivations of the Rockefellers in Lower Manhattan, but certainly no one deserves more credit or blame than the brothers Rockefeller, David and Nelson, for the changes that came about in downtown in the 1960s. The flagship headquarters of Chase Manhattan Bank had always been downtown

since the 18th century, and of course David Rockefeller, as the head of the Chase Manhattan Bank, had tremendous interests in keeping the financial district secure.

Mike Wallace, Historian: I think one of the fascinating things about the Rockefellers as a family is they're monopoly capitalists. And that gives them a certain attitude towards planning. The Rockefellers thought big. When they built Rockefeller Center they didn't build one skyscraper, they built a constellation of skyscrapers. They were into centers. You know? They were into thinking of long term plans. So they applied that mentality everywhere. And the same attitude is transferred when the next generation comes online. And here David is a particularly interesting figure. David's got big plans. David wants to expand one of the family banks, Chase Bank, which worked with big companies, and financed the movement of trade goods around the world. And David wants to expand this and then go beyond the old national boundaries and sort of start thinking internationally. But he's got a short term problem. He merges with the Bank of the Manhattan Company. He's got Chase Manhattan. He buys up lots of other little banks. They're scattered all over the downtown area. He wants to, in fact, bring them together and consolidate. But it's in the middle of this kind of sucking sound with all of these businesses being drawn up to where the real action is up in midtown. And the question is: Are they going to make a stand? Are they going to try to in fact save Lower Manhattan as the financial center?

Kenneth T. Jackson, Historian: Everybody knows that Chase Bank may be the most powerful bank in the world. David Rockefeller might be the second most powerful person in the United States after the president. They're putting their bets in Lower Manhattan. Saying Lower Manhattan either has to be revitalized and rejuvenated, or it's going to enter into a period of terminal decline.

NARRATOR: In 1955 -- declaring Lower Manhattan to be the "heart pump of the capital blood that sustains the free world" -- David leapt into the fray.

That November, he stunned Wall Street by announcing that Chase would build a gleaming new 60-story headquarters just one block north of the Stock Exchange -- the first tall tower to go up in the area since before the Depression.

Six months later -- convinced in private meetings that even that bold gesture would be not be enough to save the financial district -- he assembled a powerful coalition of business and real estate leaders called the Downtown-Lower Manhattan Association, and urged them to develop an even more ambitious plan -- before it was too late.

Mike Wallace, Historian: You need bold visions. You need bold action. You can't take small, little piecemeal things. That's not the way they operate. Rockefeller Center is not a small, piecemeal action. You have to make a profound impact on the environment, and to do it spatially, and to do it in terms of the structure of the economy and it's got to be big scale, it's got to be blazing. Otherwise, it doesn't do the trick.

NARRATOR: In the fall of 1958, the Rockefeller-sponsored group published its recommendations in a stunning 80-page report.

A master plan for the salvation of Lower Manhattan -- and one of the most radical and sweeping urban redevelopment projects ever conceived -- it called for the complete transformation of the entire downtown area -- and for the eradication of industries that had defined Lower Manhattan for centuries.

Mike Wallace, Historian: They've been talking about getting rid of the piers and getting rid of the port and getting rid of the marketplace for a long time. All of that had gone into abeyance during the Depression and the war. Now it's back on the table, and David, with his own penchant for planning, is in fact entranced by this.

David Rockefeller (archival newsreel): Well downtown Manhattan area is one of the most valuable and uniquely situated pieces of real estate in the entire world. The central core area of towering skyscrapers is surrounded by acres of marginal buildings the majority of which are more than a century old and only partly occupied.

Mike Wallace, Historian: So what do they want? They want a variety of things. First of all, they want to go on the attack against contending uses that are down there because from his perspective, we're ringed in. We're surrounded by what he's now defining not as important, viable manufacturing and commerce and port industries but as ancient, antediluvian, outmoded, dirty, dilapidated, you know, scuzzy, they're a drag. We want to get rid of them. We want to, in fact, expand the financial core and have it take over all of Lower Manhattan. Get rid of these competing uses. That's the only way we'll be safe and secure. Make it a center, you know. Make it a grand center.

NARRATOR: Under David's plan, virtually no aspect of the old port district would remain unchanged.

The fringe of aging "finger piers" that had lined the edge of the island for a century would be demolished to make way for new residential and recreational development.

The ancient narrow streets, first laid down by the Dutch and the English, would be widened to accommodate the flow of modern traffic.

Hundreds of blocks along the East and Hudson rivers would be wiped clean and consolidated to make way for gleaming new office buildings that would house the vastly expanded white collar services the new global economy required.

At the center of it all -- the anchor and emblem of the entire 560-block redevelopment program -- would rise an updated version of the idea first floated by David Rockefeller's uncle

15 years earlier -- an idea that in the months and years to come would become David's most burning ambition -- the World Trade Center.

Eric Lipton, New York Times Reporter: I think that David Rockefeller was masterful in his introduction of the World Trade Center idea. And that idea was considered brilliant. He was called "the billion dollar planner" by *The New York Times*. Mayor Wagner said it was wonderful. He, as all Rockefellers, knew how to build a power base and how to create momentum even before he released the idea to the public. And he did that. And so I think, although he only really proposed it, the fact that he proposed it really is why the World Trade Center was built.

NARRATOR: Rising from a site originally located not on the west side of Manhattan but on the east -- and dominated in the original drawings by a single 60-story tower -- the sprawling 13 acre complex would, like Rockefeller Center and the United Nations before it, be an example of what David called "catalytic bigness" -- a project whose sheer size and impact would be large enough to provide the stimulus for further redevelopment.

That very scale, of course, as David had known from the start, also placed it far beyond the reach of even the most ambitious of private developers -- none of whom had the power or resources to take on so vast a project.

Mike Wallace, Historian: How are you going to do this? Well, the fact of the matter is, you have to bring in the state, because another thing Rockefellers are accustomed to doing is for all the talk about the free market and getting government off our back that characterizes those small businessmen, the big people, in fact, understand that subsidies and government support are pretty, a crucial part of the story. So he needs a partner that is, in fact, a heavy weight, and he puts together a concerted program to bring in the one agency which might be able to commit public moneys, and to have the power of eminent domain that could clear

away competing uses and provide the funds to construct new uses that are compatible with this office vision. And that's the Port Authority of New York and New Jersey.

NARRATOR: For much of the 20th century, the ebb and flow of people and things in and out of the port of New York had been shaped and controlled by an immensely powerful but relatively little known bi-state agency called the Port Authority of New York and New Jersey -- which in its 40 year history had built or expanded every bridge and tunnel along the Hudson River -- every airport in the metropolitan region -- the massive new bus terminal on the west side of Manhattan -- and the world's first cargo container ports on the New Jersey side of the harbor.

In the years to come, under the leadership of its shrewd, publicity-shy director, Austin Tobin, the authority would invest its power, prestige and immense institutional pride in the ambitious project David Rockefeller had initiated -- and soon find itself embroiled in the most challenging, controversial -- and poignantly star-crossed -- project of its entire history.

William Langewiesche, Journalist: Of course, the Port Authority's a very strange organization. It's a hybrid. It's half-private, half-public in the way it operates and the way it thinks. It's enormously powerful. It has, you know, to overstate it somewhat, its own army. It has the Port Authority Police Department. It has public authority. It is -- also has been very wealthy.

Paul Goldberger, Architecture Critic: The Port Authority was run by Austin Tobin, who was a builder and planner who I think actually was better than Robert Moses at getting his will. He wasn't as famous as Moses because he operated a little more under the radar. Moses was too passionate about being in front of people and having fights with them, and therefore he lost from time to time. Tobin just very quietly, behind the scenes, manipulated and maneuvered and got things done, and got everything he ever wanted.

James Glanz, New York Times Reporter: He identified absolutely with the Port of New York Authority. He'd started off basically as a legal clerk back in the 1920s. He'd grown up with this agency and I think he saw the World Trade Center the apotheosis of his career. And he saw it as something that could represent what he believed was the greatness of the Port Authority.

Mike Wallace, Historian: The trouble is that the mandate for the Port Authority is trade -- is to further international trade in the harbor or New York City. And what David wants them to do, really, is to get into office building, and to make this a financial and real estate center.

Ada Louise Huxtable, Architecture Critic: The Port Authority was never founded to go into the real estate business, but it's the most profitable business in New York. And they saw great profits and ways of supporting their projects, which up to a certain point you could understand, although I think they should have not gone into the real estate business to begin with.

NARRATOR: The questionable fit between the Port Authority's mandate and David Rockefeller's plan would haunt the project for years to come.

As fate would have it, however, David Rockefeller himself would soon be in a position to overcome any initial opposition to its involvement -- at least within the agency itself.

On January 1st, 1959, his older brother, Nelson, was sworn in as Governor of New York State, and almost immediately, began filling the Port Authority's board with his own appointees -- senior Wall Street executives who could be counted on to share his brother's vision of Lower Manhattan's white collar future.

Carol Willis, Historian: Nelson Rockefeller, of course, was hugely important in the Port Authority becoming the client and the patron of the World Trade Center. One needed the

endorsement of both states, but of course New York was the most powerful of the partners of the bi-state agency.

Paul Goldberger, Architecture Critic: Nelson Rockefeller was a great and passionate builder. His greatest legacy was building stuff all over the place, in Albany and elsewhere. And he latched onto the Trade Center as a great project. It was felt that the Port Authority was the agency with the wherewithal to actually get it built, both because it had experience in building large and complicated projects, and because it had enormous bonding power and could finance this project without anything showing up on the state budget, so it made it a real win-win for Rockefeller.

NARRATOR: In the spring of 1960, as questions about the propriety of the Port Authority's involvement began to fade away, Austin Tobin -- at David Rockefeller's request -- instructed his staff to prepare preliminary drawings for a five million square foot complex along the East River.

Using the immense reserves of public and private power at their command, the Rockefeller brothers had managed to make a half billion dollar real estate gamble seem not only plausible, but inevitable.

Paul Goldberger, Architecture Critic: There was a big fallacy, though, in this whole project. The real problem with Lower Manhattan was not that it didn't have enough office space. The problem was that it was hard to get to, particularly from the suburbs where a lot of business executives and bankers lived, and it was not a particularly appealing neighborhood in a general way, in that there were no places to eat, few places to shop, no cultural facilities to speak of, no places to live. All the things that make a neighborhood interesting and varied and meaningful as a part of the city, weren't there. And so the World Trade Center violated the first law of economics, really. It added to the supply of what there was already too much

of, which was office space, without in fact doing anything to change the demand. So was wrong from its conception. But nobody quite got that.

Camilo Jose Vergara, Photographer: To me it was a sense of building, creating something that's almost at the limit of what human beings can create, you know. I like that raw power. I like that sort of feeling that they were our Godzilla, you know, that they stood up there, that they say, "So what?" you know, "We are ugly -- so what." You know? And they weren't, you know, because they were one thing one minute and they were another thing the other minute. You know, so you couldn't pass a judgment on them. You know those who would condemn them on an aesthetic basis, you know, were absolutely wrong, because it depended so much on how close you were, how far you were from them whether you saw them in the late afternoon, whether you saw them in the morning, whether you saw them in winter, whether you saw them in summer. So they were-- there was always a different feeling about them. I think, at some deeper level, there was the connection of the water to the sky. And I'm not very strong in mythology and all of this, but I think that played a very important role here--here you saw that somehow we're connected to something not just larger than New York, but larger than the earth itself.

Paul Goldberger, Architecture Critic: When the World Trade Center was conceived, the intention was not to build the world's tallest buildings. In fact, the preliminary designs on the east side were 60 or 70 stories. The first studies on the West Side were that. And then this sort of hubris, I think, took over and it just kept getting bigger and bigger, and they kept thinking they could do anything, and nobody said "no." I think the combination of David Rockefeller's passionate desire to put Lower Manhattan back on the map in a central way, in a really important way; the governor, his brother's, desire to just build bigger and bigger all the time anywhere; and the Port Authority's desire to really be the pre-eminent powerful civic authority in the world, let alone in New York -- all those things kind of combined to and as they sort of drifted to the West Side site from an original plan on the east side, it kind of drifted into being the world's tallest buildings.

NARRATOR: At 6:30 p.m. on the evening of February 13th, 1962, the newly-elected governor of New Jersey, Richard Hughes, signed into law the historic Hudson Tubes-World Trade Center bill.

Three weeks later, Governor Nelson Rockefeller followed suit -- but by then Austin Tobin had already set in motion the elaborate machinery of his 6,000 person agency -- creating a new division within the Port Authority empire, called the World Trade Office -- then appointing a tireless, unswervingly loyal 32-year-old engineer named Guy Tozzoli to oversee every aspect of the massive operation.

"You can pick the best of the Port Authority," Tobin told his eager young director, "because this is going to be our greatest project."

Guy Tozzoli, President, World Trade Center Association: I was given the job in February of 1962 to plan, to design, to construct, to operate the World Trade Center of New York. And there was only one thing, to achieve what David Rockefeller and Nelson Rockefeller wanted the Port Authority to do, I recommended to the board, you could only do one thing. You had to build what the *Reader's Digest* called "the largest building project since the Egyptian pyramids." There was no other way in this city, because this was the greatest city in the world. And it had to be something that people would pay attention to. Second thing we had to consider was, it had to be affordable." So when they gave me the job, they said, "By the way, it has to be self-supporting. So we're going to capitalize every paper clip that you use." So I had hanging over me like the sword of Damocles, etc., "You will make this thing work."

NARRATOR: The risks involved were enormous from the start -- as were the challenges, many of which grew from the competing imperatives of the project itself.

The same charter that required the complex to turn a profit dramatically restricted the range of its potential tenants -- three-quarters of whom would have to be directly involved in world trade, to satisfy the Port Authority's mandate.

When studies showed that demand for such space would be modest at best, Tobin instructed Tozzoli to increase the building's program anyway -- dramatically -- to an almost unheard total of 10 million square feet -- nearly five times the floor space of the Empire State Building.

Eric Lipton, New York Times Reporter: They knew that it was going to fail -- they were told that this was going to fail unless it was enormous. They knew that Lower Manhattan was not going to come up again unless they did something so bold and outrageous that the people of Midtown couldn't ignore them. And the Port Authority listened to that, and they went with it, and they built the biggest buildings in the world, because they knew that they had to do that, or else it was going to be a lost investment.

NARRATOR: Austin Tobin's vision of the project had just begun to expand when the Port Authority's shrewd 42-year-old public relations director distributed a fateful internal memo.

Carol Willis, Historian: It said that the person who was credited early on in the project for coming up with the idea of the world's tallest building, came out of the publicity department; that it was a woman named Lee Jaffe who sent a memo among the men who were in charge of the project, saying, "Well, as long as we're going to make them 100 stories, why not go that extra few hundred feet and secure their place as the world's tallest?"

Paul Goldberger, Architecture Critic: You know America has always believed in bigness. And I think we particularly believed in it in the 60s, when the World Trade Center was conceived. You know, bigger and bigger American things. Bigger and bigger doses of American power were going to solve anything. It was the age when all the cars were gargantuan and had fins.

It was the age when we were sending troops into Vietnam. The age of going to the moon. Exactly. And its architectural equivalent was this notion of bigger and bigger buildings all the time. We've always also romanticized height in a very wonderful way, in New York. That's very much part of our DNA, is to just build bigger and taller all the time.

NARRATOR: As word of the authority's vaulting ambitions raced through the corridors of the agency, a kind of fever gripped the members of Austin Tobin's team.

Guy Tozzoli, President, World Trade Center Association: And so first thing to do was to find the right architect. What I wanted, was a great architect. This had to be the greatest project in the world if it were to succeed. And we interviewed virtually everybody in the world, of consequence. And to the teams that I sent out to find out what architects did, the first stipulation I gave them was, "Try to find somebody who you think is young enough to live for 20 years," because I was sure that this project, as we conceived it, would take at least 20 years to finish. And it actually took more than that.

NARRATOR: In the end, passing over the entire stable of elite architects in New York, Tozzoli settled on a relative outsider -- a complex, 49-year-old Detroit-based architect named Minoru Yamasaki -- whose elegantly ornamented structures were then enjoying a kind of vogue -- and whose design for the World Trade Center would ultimately become one of the most controversial aspects of the entire project.

Carol Willis, Historian: Yamasaki was a very strange choice for the architect of the world's tallest buildings, because he had never been a commercial architect, and especially of skyscrapers or of high-rises -- his previous buildings had been mid-rises of 20 or so stories. He was not one of those architects who was particularly emphatic about a structural engineering solution. One thinks of his earlier work more in a decorative vein. He was interested in the play of light and shadow on the surface of a building. So that his previous buildings seemed

almost delicate in scale, and wholly out of proportion to the ambition of the commission of the Trade Center.

Paul Goldberger, Architecture Critic: He felt that sort-of standard issue modern architecture was harsh and unwelcoming and cold. And he wanted to make architecture warm. So he kept doing these buildings that were sort of delicate. A lot of his stuff had these funny little gothic arches and it looked kind of cute, in a weird way.

Eric Lipton, New York Times Reporter: The Port Authority thought, if we're going to build, you know, such enormous buildings that if they could hire someone who could combine the productive modern office building with an ornamental touch, that that was what they wanted. They also wanted someone who was not so old and established and also set in his ways that they couldn't, you know, twist his arm and get him to agree to do what they wanted to do. They wanted someone who was creative, but they also wanted someone that was going to listen to Guy Tozzoli and to Austin Tobin. And they got that in Minoru Yamasaki.

Paul Goldberger, Architecture Critic: They thought they were actually making kind of a leap to a sort of "high art" architect. Yamasaki was actually a kind of low-end "high art" architect. He was not one of the more admired ones by architectural historians and critics, but he was nonetheless sort of somewhere in the bottom of that group. And this was of course for him the opportunity of a lifetime.

Eric Lipton, New York Times Reporter: Minoru Yamasaki is hired in the end of August in 1962, and he's given this unnegotiable standard by Guy Tozzoli and Austin Tobin, which is that the net square foot of rentable space, including offices and retail, must be 10 million. It's called the program, and its nonnegotiable. And he knows that he cannot even, you know, have a conversation with Guy about this.

NARRATOR: "It was a terrifying program from the standpoint of size," Yamasaki remembered. "You just run scared before you get adjusted."

For months, he searched for the right form for the project -- working on a scale no architect had ever before confronted -- struggling to reconcile his own artistic sensibility with the overwhelming size of the program.

Experimenting with one model after another, he toyed with the idea of using 10 smaller structures -- then one gigantic one -- but kept coming back to the image of two slender towers, one offset from the other -- a design he hoped that would combine the practical requirements of the Port Authority's program, with the sculptural elegance he admired in the work of his great mentor, the German architect Mies van der Rohe.

Guy Tozzoli, President, World Trade Center Association: So he must have done 50 or more different models, limited by the 16-acre site that we had. And finally he sent word back to me, "It's time for you to come out and I want to show you the one I like the best." He had done twin towers and a plaza about the size of Piazza San Marco, just a little smaller than that. And it had a hotel, and it had the Customs House, everything around it. It was a lovely, lovely design. And so I said to Yama when I saw it, I said, "This is very fine design." But "Does it meet my program?" "No," he said. "It's two million feet short." I said, "Why is that?" Well, he said, "The towers are 80 floors high." Said, "You can't build a building taller than 80 floors." I said, "Why not?" Well, he said, "Because the configuration, the elevators take too much space. That's why no one has ever done that." And I remember saying to him, "You know, Yama, President Kennedy is going to put a man on the moon. You're going to figure out a way for me to build the world's tallest buildings, because that'll get us the other two million feet of space. We'll just make those towers higher."

Leslie Robertson, Engineer: I'm sure Guy Tozzoli said, "90's not high enough; a hundred's not high enough; "how about more space?" And I think he may not admit it but my guess is he was

cognizant of the fact that the Trade Center was going to become a real image of New York City. And he had high aspirations that that be the case.

Eric Lipton, New York Times Reporter: In fact Yamasaki continued to resist going up to 110 stories. And he ultimately accepted and embraced the towers at their height and began to become the most famous architect of his generation, briefly, and was on the cover of *Time* magazine, because he was building the two tallest towers. But he was never entirely comfortable, I don't think, with the height that the towers reached.

NARRATOR: Despite strong misgivings that the sheer size Tozzoli was demanding would compromise the aesthetic impact of his towers, Yamasaki eventually gave in, and -- after huddling with his chief engineers -- finally agreed that the elevator problem could be solved, and increased the height of the two structures.

On January 18th, 1964, when the final design was presented to the public at a press conference at the New York Hilton, the officials and reporters assembled for the occasion were stunned.

Yamasaki's dramatically revised program called for two identical towers, each *110 stories tall* -- a full 100 feet higher than the Empire State Building.

With every floor over an acre in size, each tower alone contained twice the floor space of Al Smith's Depression era landmark.

Even Nelson Rockefeller was astounded by the plan -- gleefully confiding to a senior aide, "My God, these towers will make David's building look like an outhouse."

An editorial in The New York Times that ran the next day took a more sober view. "Their impact on New York, for better or for worse, economically and architecturally, is bound to be enormous."

Ada Louise Huxtable, Architecture Critic: So the Twin Towers started as one tower, they became twin towers, they kept getting bigger and bigger, and they really became an ego trip. Suddenly, it became possible for the Port Authority to build the tallest buildings in the world, which is the most ephemeral of all titles. It's taken away from you very quickly and always will be. But there is something that is inside of human beings that wants to reach for the skies. And I'd like to think that it was that romantic and that spiritual and that symbolic.

NARRATOR: In many ways, the release of Yamasaki's staggering model marked a crucial turning point in the story of the World Trade Center.

Within days of the press conference at the New York Hilton, a storm of protest had begun to break over the offices of the Port Authority -- bringing to a climax tensions and conflicts that had been building for years, and threatening to halt the mammoth project before it had even gotten off the ground.

Robert Stern, Architect: I started out not liking the World Trade Center, because the World Trade Center was the Conrad Veidt of buildings. Conrad Veight was "the man you loved to hate." The World Trade Center were the buildings you loved to hate. I was very much around when the process of the clearing of the site and the protests about the destruction of that kind of funky agglomeration of street patterns and activities around it were there. I resented its massive dumbness, its huge size -- the fact that it tipped the balance of the skyline to the west in an unnatural way -- if you can call something like a manmade skyline of Manhattan natural.

NARRATOR: For two full years -- as the towers spiraled higher in Yamasaki's mind, and as the ambitions of the Port Authority vaulted upward -- a bitter war had been raging on the streets down below for the body and soul of Lower Manhattan.

Robert Stern, Architect: The Trade Center was being realized at a time when there was what could be described as a paradigm shift about architecture and urban development. Preservation was a growing sentiment among a wide number of people in New York and other places at this time. Remember the Pennsylvania Station protest was '63, the destruction '66. It's just those years the Trade Center is being hatched and developed. And so you have these two models of urbanism or urban growth coming head to head at the Trade Center site. So people were very much divided as to whether this project should even happen.

Pete Hamill, Writer: There was great argument about it at the time. People said, "This is not the business of the Port Authority. The Port Authority should be talking about the port. If we're losing the ocean liners, what are we going to put there?" And it was a valid argument, I thought.

Carol Willis, Historian: The opposition came from a lot of different directions. There were many people within the New York real estate industry who were opposed to the World Trade Center's 10 million square feet of new office space flooding the market, because they legitimately feared that that space would throw out of whack the whole commercial private market in real estate in New York.

Mike Wallace, Historian: When word is clear that the Port Authority is going to subsidize this enormous trade complex, which is now only very marginally has anything to do with the port, because in fact they're moving the port, you know. So the old rationale is crumbling. You get a complex of interests, particularly the people who own the Empire State Building, who say, "Wait a minute! *FOUL BALL!* You're in fact using government public dollars to underwrite a massive new complex of office space. What's going to happen to the rental market? It's going

to not only destroy downtown, because you're going to build far more office space than you actually need, but it's going to mess up my property up here in the Empire State Building." So they bring suits, and they try to stop it.

Guy Tozzoli, President, World Trade Center Association: The main objection to this project came from the people who owned the Empire State Building. The Empire State Building was owned by Harry Helmsley and Larry Wien. And they, when they heard the announcement of our plan, which was in 1964, they formed a "Committee for a Reasonable World Trade Center." And they gave them a budget of $500,000 to prevent the construction of the World Trade Center. So I went and met with Mr. Helmsley one day. I said, "Harry" -- I knew him -- I said, "Harry, could you tell me what is a reasonable World Trade Center?" And he said, "Yes." I said, "What's that?" He said, "100 floors high." And I said, "Well, your Empire State Building's 102." And I said, "I'm sorry, but I think 110 is a better number."

NARRATOR: For more than half a decade, the controversy raged on, in and out of court, as the Port Authority battled one opponent after another -- including, at one point, the city itself, which stood to lose millions in property taxes as a result of the project -- and television broadcasters, who feared the massive towers would block reception of their signals.

Guy Tozzoli, President, World Trade Center Association: My mother, who loved television she said, "You know, you're my son and I love you very much, but I must tell you, if you're going to hurt television reception in this area, you better stop that project of yours right now." And I knew I had big problems. In any case, we did. We actually negotiated a deal with the television people, and they moved down to our place. And it all worked out.

NARRATOR: In the end, the most tenacious, bitter and heartbreaking resistance to the World Trade Center would come from the hundreds of small businessmen whose shops and storefronts lined the ancient cobbled thoroughfares of Radio Row -- and whose entire way of life was threatened with extinction by the massive 16-acre complex.

Pete Hamill, Writer: I really felt the assault on Cortlandt Street, because you slowly began to look at the plans as they emerge, and you find out there's not going to be a Cortlandt Street. They're going to have a sign that says Cortlandt Street, and after that it will be nothing but concrete and a plaza into which nobody ever stepped.

Ada Louise Huxtable, Architecture Critic: Well, that was the urban renewal formula of the '60's, that was so disastrous in cities across the country: the idea of clearing out, supposedly getting rid of blight, which unfortunately was a synonym for history, and for small business. And then to substitute these superblocks with huge buildings. The real estate community had an expression -- *ripe for redevelopment*. You cut off, you closed, or there's an official word for that, too, you *de-mapped,* wonderful old streets and small buildings that gave you the history and the flavor and the continuity of the city, and you put them together for a superblock. For the World Trade Center, 14 historic streets became two superblocks.

Robert Stern, Architect: If you're a planner, you look at the map; or you're in an airplane, you look down at the city, you see this area: four-story buildings, slightly tumbled down in appearance; what would appear to be marginal retail uses -- electronics shops and so forth. So in the mentality of post World War Two redevelopment, this was a soft area, an easy kill: hardly anybody to relocate; no institutions to relocate; and nobody living there, to speak of. So there it was, quick: one-two-three, do it. But by the time the site began to be really getting ready for clearance, people saying, "You're tearing out this living, vital part of the city.

NARRATOR: No sooner had the boundaries of the new West Side location been announced, than store owners and merchants in the area began mounting fierce resistance to the Port Authority's plans.

Sy Sims (archival newsreel): Well over 1,000 businessmen in this area, 13 square blocks of Lower Manhattan, we will fight this with all the strength that we have in order preserve free enterprise in Manhattan. We also feel very reluctant about our city giving up 13 square blocks to the Port Authority.

Barry Ray (archival newsreel): We have here a 13-block area, a thriving business area, that will be taken away from the city of New York forever and for all time an area in which the people are the elected people and should have what to say will have no say ever again in this particular area.

NARRATOR: Leading the fight was a pugnacious, self-made electronics shop owner named Oscar Nadel, known as the "King of Cortlandt Street," who was determined to do everything he could to keep the Port Authority from taking away his business.

Oscar Nadel (archival newsreel): Now, for the last time I might say with respect to the Port Authority: stay out of private enterprise you were told to build bridges and tunnels. And airports, build them. Stay in your business and we'll stay in ours.

James Glanz, New York Times Reporter: And Oscar devised a series of spectacular protests, probably the most memorable in a way was when he had people parade him down the street in a coffin with a sign that said "Here lies Mr. Small Businessman. Don't let the Port Authority bury him." Well, believe me, he got some press.

NARRATOR: As the furor over Radio Row came to a climax, protests against large scale redevelopment projects of all kinds were gathering momentum across the city.

Just 10 blocks to the north, opponents of Robert Moses would soon score a stunning triumph in their fight to stop the Lower Manhattan Expressway.

In the end, however, even the rising tide of grassroots activism in New York would prove no match for the power of the Port Authority -- or for the extraordinary political skills of its fiercely determined leader, Austin Tobin.

Austin Tobin (archival newsreel): We're talking here about things in the public interest in a free country that concern not a few store owners on a block down in this area, but we're concerning something that's not tens of thousands or hundreds of thousands, but millions of people and their livelihoods in this area and the whole future of this area in its great port which is the foundation of its welfare in the future. And those are the issues here and not any phony issue of the Port Authority wanting to get into the real estate business, which is the last thing in the world it has the slightest interest in.

James Glanz, New York Times Reporter: Austin Tobin wanted to win so bad. There's no underestimating that internal fire. You can't run an agency like the Port Authority, especially in those times, and have the successes that it had, and not have that fire inside. Austin Tobin wanted it real bad. Now, on the technical side, Tobin was just a lot smarter than the people he was playing against. If the city was going to make a move, he knew who his people in the city council were he could count on in a pinch. He knew that if it became a public relations battle, that he had Lee Jaffe, who had all her ducks in a row with the newspapers. And he had the technical guys, he could pull out arguments that had the authority no one else had. No one else could do this. How could the city council counter an argument by his engineering department that this kind of a structure was the way it had to be? How could someone come in from, you know, little Oscer Nadel's protest group and go up against the people who had gone in and just put the second deck on the George Washington Bridge, the third tube in the Lincoln Tunnel?

NARRATOR: In the end, the Port Authority prevailed on every front.

In March 1966, the New York State Court of Appeals turned back the last challenge to the legality of its condemnations.

On the bright, windswept morning of March 21st, 1966 -- as opponents of the project looked helplessly on -- the first red brick structures on Radio Row, which had stood since the time of the Civil War, began to come down.

Mike Wallace, Historian: They lose. To make a long story short, the "Powers That Are" assembled in favor of remaking Lower Manhattan triumph. And one by one, these competing uses are literally driven into the sea or pushed on somewhere else.

Pete Hamill, Writer: I remember seeing Cortlandt Street being shoveled off to become landfill for what became Battery Park City. I mean, literally, bulldozers knocked down the old houses and just tipped them over, smashed them over like they were big fists being leveled from the sky somehow. Among the many things that were lost on September 11th were the final Polaroid photographs of the houses on Cortlandt Street with their prices that were labeled on them by the assessors, what the owners were going to get paid, you know, $9,000, $12,000, $18,000, whatever it was. All those original Polaroids, no negatives, were lost in one of the buildings on September 11th, so that even that, even that record of it is gone.

Ada Louise Huxtable, Architecture Critic (archival): Who's afraid of the big, bad buildings? Everyone, because there are so many things about gigantism that we just don't know. The gamble of triumph or tragedy at this scale -- and ultimately it is a gamble -- demands an extraordinary payoff. The Trade Center towers could be the start of a new skyscraper age or the biggest tombstones in the world.

Philippe Petit, High Wire Artist: I was in a dentist's waiting room in Paris with a giant toothache, and I was looking at what usually, you know, look through those old magazine, old newspapers. And somehow I fell onto a small article, but the picture really called my

attention. It was the twin towers but in their model form, because it was in 1968 and they had not yet started to be built. And I had not yet started to be a wire walker, which is actually the amazing part of the story. So how could I fall in love with those two towers, the highest towers in the world, said the article? So presumptuous, so arrogant, so naive, so romantic. And it was all of that. And I remember, I just -- I had to tear the article, and everybody was watching me. You know, in France everybody's watching each other. It was very quiet, and I couldn't rip the page, and plus you don't, you know, you don't steal something. So I actually let go a giant sneeze and under the cover of the sneeze, I teared the article, put it under my shirt, and I had to leave, and I had to find another dentist. But you know, what was it to have a toothache for another week, when what I had now in my chest was a dream?

NARRATOR: One of the most poignant of the many ironies surrounding the story of the World Trade Center was that the extraordinary saga of its physical rise -- by any measure one of the greatest engineering feats of the age -- would go largely unnoticed at the time -- and come to be widely appreciated only after its demise.

From the very start, the challenge of constructing two immense towers not only taller but far larger than any other in the world would force Austin Tobin's team of builders and engineers to reinvent almost every aspect of skyscraper technology and design -- challenging not only the height but the most basic construction principles of its great rival, the Empire State Building -- and producing along the way one of the greatest works of engineering art ever created.

Leslie Robertson, Engineer: The two buildings -- Empire State and the World Trade Center -- were in one way the same, in that they were symbolic of the city of New York. But inside, inside of the guts of it, if you will, the structure, entirely different. Entirely different buildings.

Carol Willis, Historian: I think the genius of the towers lay in the engineering rather than in the architecture. To build the world's tallest buildings and 110 stories took a special kind of genius. And that was really Les Robertson and his partners who came up with a way, a device, a plan in order to realize the architectural simplicity of Yamasaki's concept.

Leslie Robertson, Engineer: The tallest building I'd ever worked on was 20 or 22 stories. But I had the kind of background that very few structural engineers had. I was a pretty good mathematician; I knew a lot about the dynamics of structures and even the dynamics of electrical circuits. In addition to that, I wasn't burdened with the baggage of having done it before, I could sort of look at all those ideas and choose from them, and develop new ones and make, I think, a new kind of building, something that hadn't been created before.

James Glanz, New York Times Reporter: They weren't just building the biggest skyscrapers that had ever been put up. They were doing it in a way that hadn't really been tried before on anything remotely like that scale. Engineers use ideas, for the most part, that have been used before. They couldn't do that in the World Trade Center, and so you have a cross between an engineer and a research physicist, in effect, that is being called into play to build these structures.

NARRATOR: On the morning of August 5th, 1966, work on the World Trade Center finally began.

The first challenge came with the foundations themselves -- which would have to descend through 70 feet of water-logged landfill originally laid down by the English before reaching bedrock.

To keep the waters of the nearby Hudson at bay, Port Authority engineers constructed a gigantic concrete "bathtub" -- two blocks wide and four blocks long and seven stories high -- unearthing in the process, along with 1.2 million cubic yards of dirt, haunting reminders of

the city's long vanished colonial past, including ship-anchors, cannonballs, clay pipes and British coins dating back to the reign of King George II.

The greatest challenge by far, however, lay in the engineering of the towers themselves From the start, it was clear that the Port Authority's demand for vast expanses of infinitely flexible office space -- and the towering sculptural forms Yamasaki had designed to meet it -- would require a complete break with the traditional techniques of skyscraper construction, stretching back nearly a century.

Paul Goldberger, Architecture Critic: The World Trade Center represented a great advance technologically over skyscrapers before its time. It represented much more of an advance technologically than architecturally. It's unlike a traditional skyscraper that's supported by a steel or concrete gridwork of columns and beams going all the way through the building. The Trade Center is supported mainly by its exterior walls, which were this very, very tight, tight mesh of steel, so tightly woven that it could support the weight of the building. In a way, it's sort of like those steel mesh litter baskets that one sees out on the sidewalk, that are actually a very strong structure. But this is 110 stories' worth, and square rather than round. But the same kind of idea.

Leslie Robertson, Engineer: The Trade Center had a different kind of structure. It was built more like the wing of an airplane. In the wing of the airplane, the strength is all in the surface of the wing, or the fuselage, in both cases. All of the interior columns that had been used in the past were a detriment. They were harmful to the design, because we didn't want those interior columns. We wanted that weight out on the outside, where it would do some good for the stalwartness of the building in resisting these giant loads from the wind.

NARRATOR: Only such a design, Robertson knew, could fulfill the unprecedented practical needs of the building, and still counteract the greatest natural stress to the towering, sail-like structures -- the force not of gravity but the wind.

James Glanz, New York Times Reporter: You know, if you put your feet close together and somebody shoves on your shoulder, it's easy for you to fall over. If you put your feet apart, and someone shoves on your shoulder, it's easy for you to stand up. And the steel on the outside of the towers was like your feet spread apart, and the shove was like the gusts of the wind, you know, in off the Atlantic Ocean. If you put the steel out there, you could save a lot of money probably 40 percent in the total amount of steel. But it also had other implications for how you would use this building, and one of them is that you would have none of these interior columns that hold up the Empire State Building every 20 feet, messing up your floor plan. So anybody could come in and deal with the floors however they wanted to, put up their partitions, and it was kind of real estate paradise. Now in fact it was a design that looked great on paper. But when they went out to the wind tunnel in Fort Collins, Colorado before they put the buildings up they found out that the structure, when it was really put together, at least in miniature form, didn't work quite the way they'd expected. It just swayed too much beyond anything that would have been remotely reasonable. In fact, they moved so far that at least one model broke and fell over in the wind. Now, that didn't mean that the real towers would fall over. It just meant that they hadn't taken into account the tremendous forces they were going to be dealing with.

Leslie Robertson, Engineer: And so we had to rethink the entire process. How much can a building move in the wind? How much would they oscillate? No one had ever found out. No one had ever tried to find out, even, or even thought there was an issue to find out about. Not only how much *does* it move; how much *can* it move?

James Glanz, New York Times Reporter: And the upshot of it was that Robertson and his collaborator, Alan Davenport, came up with the idea of basically putting shock absorbers in buildings which had never been done before. And, you know, God darn it, it worked. They kept these things from swaying beyond the tolerances that they'd set.

Guy Tozzoli, President, World Trade Center Association: They could resist an 150-mile wind blowing consecutively on one side of the building for 30 minutes, and they would not fall down. I used to say they move like a snake. Different from all other buildings in the world, the strength to resist the wind is in the outside walls instead of the elevator core, which is normal for all other highrise buildings in the world. And so these towers were much stronger, if you would.

James Glanz, New York Times Reporter: The really sublime thing about this from the point of view of the Port Authority is that all of this is happening in the background while Austin Tobin is passionately defending these structures against the critics back in New York city, who have no idea that any of this is going on in the background. All it would have taken, probably, was for some of the opponents to know what was going on behind the scenes. When they're out in Colorado in the wind tunnel, and one of the models fell over, put that in one New York newspaper, and there's no World Trade Center. When they're out in Eugene, Oregon, testing people in a room, and people are getting sick as they go back and forth as the motion of the building is being simulated, again, put that in one television program in prime time in New York City. It's very hard to see how the World Trade Center was going to be built. But the Port Authority successfully walled off that and other information from the public in the way that shows how good they were, how good Austin Tobin was.

NARRATOR: As innovative in their construction as they were in their design, the towers were assembled, not one column at a time, but in immense pre-assembled pieces, each three-stories tall, that dramatically speeded the construction process.

Leslie Robertson, Engineer: We had experimented with pre-prefabrication in a few buildings, but never even close to the scale that it was done on the World Trade Center. Huge prefabricated elements, constructed all over the United States, with materials that came from all over the world, and finally assembled into one building in New York City. We had

steelwork being fabricated in Los Angeles, in Dallas, in Seattle, in Pittsburgh, in Virginia, and down into Georgia and up into Canada. And all of that was coordinated through our offices.

NARRATOR: At the peak of construction, more than 800 tons of structural were being delivered each day to the massive construction site, raised into the sky by four Australian built "kangaroo cranes," and bolted into place by Austin Tobin's army of 3,600 men -- an extraordinary team of iron workers and construction specialists that included Carl Furillo, who had once played right field for the Brooklyn Dodgers, and a New Jersey man named George Nelson, who 40 years earlier had helped build the Empire State Building, and who now shrugged off work on the World Trade Center as "just another building."

Guy Tozzoli, President, World Trade Center Association: The Koch Erecting set were the incredible people who ran the job. And I still see Mr. Koch from time to time and I remind him, not one ironworker was killed in the construction of the World Trade Center. And this is what they used to do. They'd be up on the steel, and they'd look out, and they'd say, "We're going to be all right today, boys. Mr. Koch just went to mass." There's a little Catholic church down there. He went at eight o'clock every morning. And they said, "That takes care of us for the day." And sure enough, not a single ironworker died. Now of course, the building lent itself to that because we put steel up on the outside walls. And then you could only fall two or three floors, if you ever fell off. But that was the way it was.

NARRATOR: Before signing off on the design, Robertson and his team performed one last unprecedented safety check.

Leslie Robertson, Engineer: One of my jobs was to look at all of the possible events that might take place in a highrise building. And of course there had been in New York two incidences of aircraft impact, the most famous one of course being on the Empire State Building. Now, we were looking at an aircraft not unlike the Mitchell bomber that ran into the Empire State Building. We were looking at aircraft that was lost in the fog, trying to land. It

was a low-flying, slow-flying 707, which was the largest aircraft of its time. And so we made calculations, not anywhere near the level of sophistication that we could today. But inside of our ability, we made calculations of what happened when the airplane goes in and it takes out a huge section of the outside wall of the building. And we concluded that it would stand. It would suffer but it would stand. And the outside wall would have a big hole in it, and the building would be in place. What we didn't look at is what happens to all that fuel. And perhaps we could be faulted for that, for not doing so. But for whatever reason we didn't look at that question of what would happen to the fuel.

NARRATOR: In the end, Robertson and his team did everything they could to protect their building against a 500-year wind -- the worst conceivable gale to which the building could be subjected in 500 years.

It was inconceivable at the time that it would also have to be protected against a 500-year plane crash -- or a 500-year fire.

James Glanz, New York Times Reporter: I think in effect, the towers had an Achilles' heel, and that was the fire. They really didn't know much about fire. And they really didn't pay much attention to fire. The structure they finally came up with worked just as good as the traditional ones in battling the wind and holding up against gravity. But they were much lighter. The steel was lighter, thinner. And you know how if you slice up an ice cube and put it in your drink it will, it will melt faster than if you have a whole ice cube. Well, that's the way of these lighter structures. They would heat up faster in a fire. The real question is: Should they have been able to anticipate that this was something that they would have to protect against? And I just don't know the answer to the question.

Paul Goldberger, Architecture Critic: One of the things that we have to say about the Trade Center, with all due respect to its qualities such as they were, is that it was a dinosaur when it went up. It represented a way of building that had in fact already begun to be discredited.

Jane Jacobs's book, *The Death and Life of Great American Cities,* which played so large a role in shifting people's viewpoints back toward an appreciation of the street and the real city and the organic nature of cities, had already appeared. And by the time the Trade Center was finished in the 70s, there were lots of other things to express a sort of shift in attitude. So the World Trade Center was an enormous project with a very long gestation period, that was sort of out of date by the time it was finished, which made it, in a way, all the sadder.

Robert Stern, Architect: And then of course, the Trade Center's finished at a time when the economy is in the toilet -- I think that's the best way to put it. The Vietnam War has ripped the country apart. The divisiveness of the young versus the old, the "haves" versus the "have nots," had never been greater than perhaps except in the case of the Civil War. And there were these two monsters, huge, undifferentiated buildings, rising here, and the context around them hadn't even been finished.

NARRATOR: For three long years, from 1968 to 1971, the steel work on the towers continued -- as the 1960s came and went, and the war in Vietnam raged on -- wreaking havoc with the American economy, straining the post war global order, and threatening to tear the nation's social fabric apart.

In April 1970, progress on the towers was slowed when scores of construction workers clashed violently with antiwar demonstrators on the streets of Lower Manhattan.

By then, public sentiment about the project and its builders had begun to shift dramatically, and even Austin Tobin had begun to lose his way.

James Glanz, New York Times Reporter: As they're building the World Trade Center, after he's given everything he had to put it up. He's starting to battle with New Jersey governor Cahill. He's also losing the battle on mass transit. His reputation in the press is taking a dive. He's always had very careful control of the press, partly through his chief press officer, Lee

Jaffe, through all those years, very carefully managed kind of guy, someone who didn't have to deal with these little details like legislatures, mayors, the citizenry of New York City. And by the time the towers are finished it's no longer fun for him. He's really become embittered.

NARRATOR: As the structures began to dwarf even the highest of the city's old Art Deco towers, the excitement and early optimism about their immense size began to fade away.

Paul Goldberger, Architecture Critic: I remember being offended that the title for the tallest building was being taken away from the Empire State Building, a building that I liked much more and felt represented the spirit of New York much better than the World Trade Center. And I remember thinking, you know, this whole thing is a sort of gargantuan piece of banality.

Carol Willis, Historian: As always happens in New York, buildings come in cycles of boom and bust. And generally the tallest buildings come before the break in the cycle, before a crash. And that was the case with the World Trade Center. The fiscal crisis, the energy crisis, all kinds of crises in New York, a social crisis as well, befell New York in the -- in the mid-1970s and affected the fortunes of the city in many ways beyond the sheer revenues of trade and of business.

NARRATOR: And still the twin towers rose, as the city below them sank deeper and deeper into social and economic disarray.

Finally, at 11:30 a.m. on the cold foggy morning of Wednesday, December 23rd, 1970, the final column of the north tower -- a 36 foot long, four-ton piece of steel, draped with a large American flag -- was hoisted into place on the 110th floor.

To celebrate the momentous occasion, workers raised a 30-foot-tall Christmas tree on the southeast corner of the building.

Guy Tozzoli, President, World Trade Center Association: December 1970. The reason I remember it is the last piece of steel went up and the next day the first tenant moved into the bottom of the building. Actually two tenants moved in that day, and on the ninth and 10th floors.

NARRATOR: Seven months later, on July 19th, 1971, the topping out ceremony was repeated on the south tower.

In all, a total of 192,000 tons of structural steel -- nearly four times that of the Empire State Building -- had been raised 1,360 feet into the sky -- 25 stories taller than the top floor of Al Smith's beloved uptown landmark, and 110 feet higher than the tip of its great Art Deco mooring mast.

To a remarkable degree, however, the achievement would go all but ignored -- obscured by the growing troubles of the city below, and by the rising tide of criticism that now began to engulf the project just as it neared completion.

Camilo Jose Vergara, Photographer: There was some sense that there was something insane here that was -- that was being done, because there was no need for it. This was a city that was getting into more and more trouble, where the city finances were terrible, where crime was rising, where all of the problems that then came to a head in '75, where the almost bankruptcy of the city, were all there. And yet they were putting this building up! And you'd say, "What's going on?"

NARRATOR: From the very start, response in the press to Yamasaki's towers was savage. One critic dismissed them as "a standing monument to architectural boredom," another as "the largest aluminum siding job in the history of the world."

Ada Louise Huxtable, Architecture Critic (archival): The towers are pure technology, the lobbies are pure schmaltz and the impact on New York is pure speculation. The windows are so narrow that one of the miraculous benefits of the tall building, the panoramic view out, is destroyed. These are big buildings but they are not great architecture.

NARRATOR: Yamasaki himself, though privately devastated by the storm of criticism, stubbornly defended his design, arguing publicly that the restricted views kept office workers focused on their tasks.

Robert Stern, Architect: Of course people hated, you know, working in the Trade Center. The reason it was filled up was because the space was cheaper than a comparable space in lower buildings. They hated it because the elevator systems, nuisance to go up and down. It was like you planned whether you had to actually leave your office because it was so inconvenient. I think the Trade Center was also a terrible failure on an urban design level or a public space level. The plaza was dead. The plaza managed to be dead, not only in day-to-day use, or even for the occasional festival, but could never quite fill it. But even in the movies, when they made *The Wiz* or when they made the second version of *King Kong*, it still couldn't come to life. It just resisted vitality.

Paul Goldberger, Architecture Critic: The impact of the Trade Center on the Lower Manhattan environment was really rather devastating. The plaza in front of the World Trade Center was a concrete football field. It was not an appealing place at all. Most of the shopping and activity took place underground, which was at a further remove from the street life of New York. The buildings only succeeded as abstract objects. They did succeed ultimately pretty well as abstract objects, but it is not out of abstract geometric forms that you make a city. You make a city out of street life. And the World Trade Center pushed away the street life of Lower Manhattan in favor of something very different.

NARRATOR: For the Port Authority, meanwhile, far more immediate problems loomed.

Almost immediately, the basic premise upon which the towers had been built -- the desirability of concentrating trade-related businesses under a single roof -- was shown to have little basis in reality. Despite vigorous efforts to promote the complex, few tenants signed up.

Paul Goldberger, Architecture Critic: At the beginning, because there was not nearly enough business to fill it, it was bailed out by its builders. Governor Nelson Rockefeller committed to putting offices of the State of New York into one tower, and the Port Authority moved all of its own offices into the other. So in fact, it was mostly a big civic boondoggle, in effect, and had only a minimal amount of tenants who were actually part of the original concept.

NARRATOR: By the early 1970s, the World Trade Center, whose final price tag had soared past a billion dollars, was losing $10 to $15 million a year, with no end in sight.
And there was even worse news for the downtown real estate market.

Far from revitalizing the fortunes of Lower Manhattan, the World Trade Center had flooded the market with millions of square feet of unwanted office space -- deepening the district's economic woes still further.

Kenneth T. Jackson, Historian: So by somehow bringing all these many millions, 10 million square feet of office space on line, at the time that there's an economic recession, I'm pulling people out of your building to come into mine, subsidized by the government. Your building then is not worth as much, because your building, by the way, does pay taxes. And yet you've got fewer tenants, so that what we have done here in New York City, at least according to the critics was, we built a new building that we don't need. We've reduced the value of the old buildings that we already had and were paying taxes and supporting the police and the schools and fire and everything else, so we've in a sense compounded our mistake.

Carol Willis, Historian: I think when the Trade Center was finished in 1973; we were just at the moment when New York was about to begin descending rather than ascending. The fiscal

crisis would hit. The buildings would remain largely empty for many years. They would consume the kind of energy -- on their floors with fluorescent lights that had only one switch and where it was simply on or off. There was in every way a kind of symbol of empty wastefulness that represented an over-reaching ambition perhaps on the part of Americans and a blind eye to the environment and to other kinds of social equations that seemed to be lost in this sort of blank symbolism of these two great icons.

NARRATOR: On the rainy, windswept morning of April 4th, 1973, while work on the upper floors of the two towers continued, the Port Authority held a dedication ceremony for the complex -- a somber event forced by bad weather to move from the outdoor plaza to the lobby of the north tower. The guest of honor, Secretary of Labor Peter Brennan, never showed up. Nor did New York's mayor, John Lindsay. Nor to the astonishment of those present did the man most responsible for the project, Austin Tobin, who had retired from the Port Authority the year before, worn out and disheartened.

When a reporter asked why he had missed the historic ceremony, Tobin replied simply, "Because it was raining."

James Glanz, New York Times Reporter: He was not there at the official opening of the World Trade Center. He never moved into the World Trade Center. And he really hardly goes down there until he is dying of cancer. So is it sad? Yes, it's extremely sad. It's a very sad and unexpected end to the story, because this guy was one of the most powerful and most efficient and admired and studied bureaucratic leaders in the history of the United States. But his crowning achievement turns out to be, in the end, a big draft of bitterness for him.

Guy Tozzoli, President, World Trade Center Association: You know, we named the plaza the Austin Tobin Plaza, long after he left. And Austin, we knew, was very sick. And I think of all the projects that the Port Authority did, I think Austin felt that the Trade Center was his greatest. And I got a call one day, and he came down in a wheelchair. And I wheeled him out

to the plaza. And he asked if he could be left alone. And Austin sat in that wheelchair for almost two hours. And he looked at the plaza and the great sculpture that was in the plaza, and he could see the hotel and the Customs House and the commodity building and the Nagare sculpture's beautiful, and Fritz Koenig's sculpture, which was in the middle of that fountain. Those were great works of art. And I remember leaving him there, and then I came and got him. And I never saw him again after that. He died almost within weeks after that one moment, two hours, being out there looking at the plaza of the World Trade Center, named after him.

NARRATOR: The most sublime and transcendent episode in the entire history of the World Trade Center would come in the first dark and difficult years after its opening -- while the city lay deep in the worst financial crisis of its history, and while the towers themselves, still unfinished on the uppermost floors, seemed to stand as a painfully extravagant monument to folly and misguided ambition.

For six years following his epiphany in the dentist's office in Paris, Philippe Petit had nurtured his dream -- painstakingly perfecting his skills as a high wire artist, and devouring everything he could find about the twin towers.

In early January 1974, he flew to New York City for the first time in his life -- to put in motion the next elaborate phase of the illegal escapade he now called simply *the coup*.
He was 24 years old.

Philippe Petit, High Wire Artist: When I came to New York, it was winter. And I had a little *journal* or a little whatever, I wrote my thoughts. And I thought: *It's old, it's dirty, it's full of skyscrapers, I love it*. That was my first little entry the first day I saw New York. I remember my first encounter with the the Twin Towers. I got out of the subway -- it was a long subway ride -- and out of the darkness I emerged at the base of one of the tower, and look up. And like a slap in the face I saw that my dream was impossible. I mean, it was right there in

aluminum and glass and steel and concrete behind it. It was right there. It said: *impossible*. And yet somehow I actually find myself trespassing over the plaza, still under construction, and sneaking in one of the tower and climbing and climbing inside the building, until I find myself very close to the top, and until there were no more windows, no more partitions. There were just the skeleton, the beautiful steel columns and beams of the building. And then I emerge and there were no gates. There were nothing to protect you from the devouring void. And I stand and I looked. And the second I look at the other tower, another time the word *impossible* etch itself inside me. But somehow I went back down and looked again from the street, and there I realize, *it's impossible. But I'll do it*. And there was the beginning of a second wave of work -- the real work, the work of getting into the building, not into archaeological findings or architectural magazines, but this time it was the monster, the beast, getting into the belly of the beast every day, which I did, hiding myself, disguising myself, sneaking, being caught, abandoning the project, going back to it, for eight months -- eight months in New York. And the towers, the more I got to know them, the more they become an ally. That's why, when I say I conquered them, probably it's wrong. I married them, certainly. But they became my friends.

Guy Tozzoli, President, World Trade Center Association: It was 1974. Remember now, I had opened the tower at the end of '70 and I wanted public relations. I needed publicity. I had at least 10 million, 12 million square feet of space, etc. And one day a young journalist, he said he was, named Philippe Petit from France, showed up in my office with two photographer friends of his. These were his buddies. And he said, "You know, I'd like to do an article on the World Trade Center." And I said, "Welcome, that's great." And naturally I never asked, "Show me your credentials." And later on, I recognized that the subject always got back to how those towers move in the wind.

NARRATOR: After eight months of false starts, last minute reversals, heartbreaking postponements and maddening delays, the hour of *the coup* finally arrived.

At six o'clock on the evening of Tuesday, August 6th, 1974 -- while one team made its way up into the north tower -- Petit -- delirious with exhaustion, and seething with the holy madness of his dream -- slipped up to the top of the south tower, with two confederates posing as deliverymen in tow -- carrying with them three heavy crates filled with equipment, including a disassembled balancing pole, wire for rigging, 250 feet of one-inch braided steel cable, and a bow and arrow.

Philippe Petit, High Wire Artist: The first problem was how to pass the cable across, how to pass the first line, which will ultimately become a rope strong enough to pull a heavy steel cable. So how to get that fishing line across? It's like 200 feet from center of roof to center of roof, roughly. We had all kind of ideas. And the idea that prevailed was the one I thought was ridiculous, was a bow and arrow. But it actually worked. So with a fishing line and a bow and arrow we passed the first line across. And then all night we pulled, and then the cable was secured.

NARRATOR: It took all night to complete the complex job of rigging -- to anchor and secure as best he could the slender one-inch cable a quarter of a mile in the sky across the 130 foot gap separating the two immense towers.

One thousand three hundred and sixty feet below, Wall Street was just beginning to come to life when, at a little past seven on the morning of August 7th, 1974, Philippe Petit stepped out onto the slender, thrumming wire that stretched out across the immense shimmering void.

Philippe Petit, High Wire Artist: Whenever other worlds invite us, whenever we are balancing on the boundaries of our limited human condition that's where life starts. That's where you start feeling yourself living. So when my I found myself one foot on the wire, one foot on the building, and ready to decide to shift my weight to become a bird it was not something new. And after a few steps, I knew I was in my element. I didn't even took the full

length of the crossing to get to know the rigging and the vibration of the building and the wire. And then, very slowly as I walked, I was overwhelmed by a sense of easiness, a sense of simplicity. And actually I can be seen on the first pictures smiling, smiling probably out of disbelief. It's so easy, after all those years and months of ups and down and detours, victories and disasters. Finally I was carrying my life on a path that was the simplest, the most beautiful, and the easiest.

NARRATOR: Down on the street below, thousands of people on their way into work looked up in wonder and disbelief -- transfixed by the sight of the tiny figure, walking on air between the two towers.

Philippe Petit, High Wire Artist: Somehow I found myself spending 45 minutes and doing eight crossings. There were thousands of people, at some point a hundred thousand people. And actually, at some point during these different crossings, I actually could hear my audience a quarter of a mile below. And I could hear them punctuating what I was doing on the wire. Let's say if I would take a bow on one leg, or salute the horizon, or kneel in front of a tower to say hello to the tower, I would hear, almost with an echo, the people cheering, screaming, applauding.

Guy Tozzoli, President, World Trade Center Association: I had in my car a radio that connected me to the police desk at the World Trade Center. And on the day in question the light went on. And the patrolman at the police desk said, "Mr. T, there's a problem in the World Trade Center." I said, "What's the problem?" He said, "There's a guy walking on a tightrope between the two towers. What should we do?" And I couldn't think of anything else. I said, "Don't let him fall off," and I hung up. So then I drove a little further. I called back. I said, "By the way, this is incredible. There's somebody walk-- If he doesn't fall off, and he comes off, don't arrest him."

NARRATOR: Within minutes, police officers were dispatched to the roof of the south tower. Sgt. Charles Daniels of the Port Authority Police never forgot the things he saw that day.
Sgt. Charles Daniels (archival): Well, after arriving on the rooftop Officer Meyers and I observed the tightrope "dancer" because you couldn't call him a "walker" approximately halfway between the two towers. And upon seeing us he started to smile and laugh and he started going into a dancing routine on the high wire. He then went down to one knee and we stepped to the background and I said for everyone to be quiet. And at this time he laid down on the high wire and you know, just lackadaisically rolled around on the wire like. He got up he started walking and laughing and dancing. And he turned around and ran back out into the middle. He was bouncing up and down. His feet were actually leaving the wire and then he would resettle back on the wire again. Unbelievably really. To the point that we just everybody was spellbound in the watching of it. And I personally figured I was watching something that somebody else would never see again in the world. Thought it was once in a lifetime.

Philippe Petit, High Wire Artist: During the walks, I had a sense of dancing on top of the world. I had a sense of having a communion with the city of New York, represented by the crowd below. I had a sense of having stepped in other worldly matters. At some point in one of the crossing, I lay down on the wire and looked at the sky, and I saw a bird above me. And again, because of my sense were decouplated, I could see that bird pretty high up, and I saw the eyes were red. And I thought of the myth of Prometheus there. But the bird was circling and looking at me as if I was invading his territory, as if I was trespassing, which I was. So at some point I thought the gods -- the god of the wind, the gods of the towers, the god of the wire -- all those invisible forces that we persist in thinking they don't exist, but actually that rule our lives -- might become impatient, might become annoyed by my persistent *vagabondage* there. So my intuition told me it was time for me to close the curtain of this very intimate performance, it was a walk between me and the towers and I landed on the same tower from which I started, the south tower, and then I had the octopus of the authority, you know, grab me by their hundreds of arms.

NARRATOR: When he came in off the wire, Petit was immediately taken into custody and rudely manhandled down into an underground police station deep beneath the south tower, where he was formally charged with no fewer than 14 misdemeanors -- including criminal trespass, disregarding police orders, reckless endangerment, and performing without a permit.

Then he was besieged by an army of admiring reporters.

Reporter (archival newsreel): Why did you do this?

Philippe Petit, High Wire Artist (archival newsreel): That's the thousandth "why" this morning. There's no why. Just because when I see a beautiful place to put my wire, I cannot resist.

Reporter (archival newsreel): Weren't you afraid up there at all?

Philippe Petit, High Wire Artist (archival newsreel): I was not afraid. But I was just looking what I had in front of me. I have really something which was huge and incredible, you know. So afraid, not, but living more than a thousand percent. So perhaps that's close to afraid, I don't know. But at the same time I was happy, happy, happy, happy.

Philippe Petit, High Wire Artist: You need dreams to live. It's as essential as a road to walk on and as bread to eat. I would have feel myself dying if this dream would have been taken away from me by reason. The dream was as big as the towers. There was no way it could be taken away from me by authority, by reason, by destiny. It was really anchored to me in such a way that life was not conceivable without doing this.

NARRATOR: The astonishing feat of high wire poetry was the highest point in Philippe Petit's life -- and, in many ways, in the life of the twin towers themselves.

As Guy Tozzoli had predicted, the exploit was front page news around the country and around the world, and Petit himself became an instant folk hero, and nowhere more so than in New York.

In the end, thanks in large part to Tozzoli himself, who personally interceded with the judge, all charges were dropped, and the 24-year-old Frenchmen was sentenced instead to perform for a group of children in Central Park.

Pete Hamill, Writer: Philippe Petit was the first person to humanize these things, you know he put a human mark on. He said, "I don't care about your architect and your plans for world trade, I'm gonna walk this thing." And there he did doing this amazing feat in which the whole city applauded, because first of all it took guts and skill but also, it took these two buildings and he conquered them in some astonishing way that had the whole town cheering. But it was an astonishing moment. And after that it never happened again. It's as if you did that once. It was not to be repeated.

Guy Tozzoli, President, World Trade Center Association: Fabulous. You know. It's just that this guy had done this, and it made the towers belong, if you would, more to New York.

NARRATOR: Petit himself would never lose his deep love for the towers.
In honor of his achievement, the Port Authority presented him with a free lifetime pass to the observation deck on the south tower -- where on a bright, windswept afternoon not long after his historic walk, he signed his name in indelible ink on a steel beam overlooking the vast canyon where he had danced among the clouds.

In the years to come, he would return to the high perch whenever he could -- trying, without success, to relive the amazing walk in his mind -- and hoping to catch a glimpse one more time of the valiant seagull he had once seen sailing high above him a quarter of a mile in the sky.

It never came.

Though few people realized it at the time, Petit's extraordinary exploit marked a crucial turning point in the life of the twin towers, and in the life of the beleaguered city that was their home.

In the decades to come, the fortunes of both would undergo a remarkable transformation, as the foundering city, all but written off in the darkest hours of the fiscal crisis, began to rise again in new and unexpected ways -- and as the World Trade Center itself, a hollow mockery when it opened in 1971, finally began to fulfill the grandiose promise of its name.

Niall Ferguson, Historian & Professor of History, New York University: Well, in many ways, the World Trade Center didn't look to most Americans like something that had anything to do with world trade. It was a little bit like the World Series, not really having much to do with the rest of the world. It might have been more convincing if it had been called something like the Manhattan Business Center. For the rest of the world, though, it came to be *the* quintessential expression of globalization, in the sense that New York was the capital of the world economy. And in that sense, the two tallest towers in New York were really bound to symbolize economic globalization, even if people living in Manhattan just thought they were the biggest shadow-casting pieces of real estate downtown.

NARRATOR: The first changes came while the city still toiled in the depths of the fiscal crisis. In 1975, the observation deck atop the south tower was opened to the public for the first time -- and almost overnight became one of the most popular tourist attractions in the city.

One year later, on July 4th 1976, the nation's bicentennial celebration came to a stunning climax in New York harbor -- where thousands of small boats and dozens of tall ships could be seen parading majestically against the breathtaking backdrop of the soaring twin towers. That same year, a spectacular rooftop restaurant opened for business on the 106th and 107th floors of the north tower.

"Suddenly I knew," the food critic Gael Greene wrote, "that New York would survive. If money and power and ego could create this extraordinary pleasure and instant landmark, money and power and ego could rescue the city from its ashes."

Guy Tozzoli, President, World Trade Center Association: The observation deck and Windows on the World were the two things, in my judgment, that turned the city of New York from looking at the Trade Center as some monster downtown to something that was theirs. They began to adopt it. And it was great. It was so successful that you had to wait seven months to get a Saturday night reservation there, unless you knew somebody. It was incredible. And we were consistently the highest grossing restaurant in the whole world.

Robert Stern, Architect: These kinds of things give a building a human dimension. One would hope that the building would have a human dimension in its design. That has always been debatable, with the case of the Trade Center. But events did happen that showed that this could be brought into the city and into the life of the city. Another thing about the Trade Center that changed it was the whole changing character of Lower Manhattan. People began to live downtown. And they rather liked the Trade Center, the big open space. And then the people living in Tribeca -- also the people living in Battery Park City began to see these buildings as an identifiable landmark in their neighborhoods, in their daily lives. You know, you could orient yourself. You knew where you were in relationship to the Trade Center towers.

Paul Goldberger, Architecture Critic: Now, as the years went on and we reached the period of the 90s, with the great boom in financial services, financial services businesses needed much more space, and they gradually took over space as the state moved away to other locations, as the Port Authority moved some of its functions out, and so forth. That stuff was rented commercially.

Carol Willis, Historian: The Trade Center took nearly a generation to become truly successful. Through the 1980s, the buildings filled up. In the 1990s, they became truly profitable and gained a kind of credibility in the commercial real estate market that had been predicted at the very beginning but not realized for over 20 years.

Guy Tozzoli, President, World Trade Center Association: And it turned out fine. The Trade Center was self-supporting. In fact, when I retired from the Port Authority of New York in 1987, the World Trade Center of New York was making more than $133 million a year, net, net, net. So, you know, it worked. And then all those buildings in Lower Manhattan, all the jobs that it created for people.

Kenneth T. Jackson, Historian: Even though we thought of them as a failure, I think now looking back we can see what they did contribute. First of all, economically, had they not been there in the late 1990s when New York City suddenly boomed practically like no place on the planet, the city needed all 10, 15 million square feet of office space that those buildings provided. If they were not there, so many other companies would have had to go elsewhere. So we had that space. And so in a sense, they helped make possible the renaissance of New York in the 1990s.

Niall Ferguson, Historian & Professor of History, New York University: Now, the reality was that these huge office blocks, built for commercial purposes, were becoming more and more centers for world trade and world transactions generally. So in a way, the World Trade Center became more and more truly a "world trade center" over time, and by the 1990s, perhaps for

the first time, really was worthy of that name. And I'm not sure how far Americans, particularly New Yorkers, quite saw that it was a symbol of economic globalization.

NARRATOR: By the 1990s, the new world order set in motion a half century before had succeeded in ways no one could have imagined in the years following the end of World War Two -- or even as the towers themselves had first begun to rise at the very height of the Cold War.

In less than two decades, the cultural and commercial energies unleashed by the forces of globalization had breached political and ideological barriers around the world -- defeating and absorbing many of America's one-time enemies behind the Iron Curtain -- linking the economic fortunes of distant nations as never before -- setting whole populations and cultures on the move -- and sending millions of new immigrants from every corner of the globe flooding into New York City -- in numbers that rivaled, and with a diversity that far exceeded, even that of the great immigration of a century before.

No building in New York, or for that matter, in the world, symbolized those astonishing transformations more dramatically than the World Trade Center itself -- which by the late 1990s had become a microcosm of the new global culture: humming with electronic financial transactions 24 hours a day, and home to a bewilderingly diverse working population, that included Sikh computer programmers, Israeli accountants, Turkish engineers and financial experts from emerging markets in Malaysia, Syria, Uruguay and Ghana.

Numbered among the tall towers' window washers were men who hailed from Poland, Yugoslavia, Albania, Turkey and Ireland. The 79 employees at Windows on the World included immigrants from 30 different countries.

Niall Ferguson, Historian & Professor of History, New York University: Well, the United States is the economy that seems to inhale more than it exhales. It inhales capital. It inhales

people. The huge increase in flows of capital and people into the United States, which characterized the 1980s and 1990s, undoubtedly created a kind of asymmetry. And so although economically the United States was completely integrated into the world economy, politically it was becoming more and more detached from it; the myths which go right back to the very foundation of the United States, about the special providence that exempts the U.S. from the rest of the world's nasty political conflicts. I mean this proves incredibly tenacious, and people are still clinging to this in the 1990s, when it's absolutely clear that the U.S. had never been more connected to the rest of the world.

NARRATOR: The first hint for most New Yorkers -- and for that matter for most Americans -- that globalization might bring with it unforeseen consequences came a few minutes after 12 on a cold and cloud-covered Friday afternoon in the winter of 1993.

Robert Stern, Architect: We mustn't forget that the building had already earned its footnote in history as an object of scorn, as a symbol of everything most of us in the United States think what is great about our country, our open free exchange of capitalism and ideas, and our willingness to deal with the world as a overall community.

Kenneth T. Jackson, Historian: That failed miserably. It killed six people, which is about as minimal a number as you could think of at the World Trade Center. But we didn't take that threat seriously enough, I think. We took it seriously, but not seriously enough.

NARRATOR: By the summer of 2001, the culture of airmindedness New York had been pioneering for nearly a century had reached its very zenith.

Immense towers now soared high into the air in cities around the world. Jet planes moved people and goods at high speed across the skies, while global broadcast networks and new digital media sped images and information around the world instantaneously.

Thanks in large part to the astonishing projective power of American commercial culture -- which had now penetrated to every corner of every nation in the world -- the twin towers had become the most familiar structures on the most familiar skyline in the world -- and the ultimate emblem of the forces of globalization, still making their restless way across the globe.

New York itself, meanwhile -- having reaffirmed its status as the city at the center of the world -- had emerged as one of the most strangely paradoxical cities on earth -- at once bewilderingly diverse and cosmopolitan -- and yet, as its own citizens often freely acknowledged, strikingly insular and inward-looking.

Paul Goldberger, Architecture Critic: I don't think cosmopolitanism is something that we define only in terms of connections and awareness. We like to. In its better guise, it is about awareness and sophistication and connection and knowing what the world is. But Cosmopolitanism can sometimes also mean a degree of self-absorption that blinds you to things outside. And maybe we've just been spending too much time, you know, staring at ourselves and thinking that the world begins at the Hudson River and ends at the East River, and there isn't anything else. Cosmopolitan people are also often people who have substantial powers of denial. Maybe we just didn't want to see what we didn't want to see.

Kenneth T. Jackson, Historian: Well, I think one of the sad things to me is to remember the enormous human effort that went into building those buildings, the gigantic endeavor, the thousands of construction workers, the millions and millions of man hours and effort, and how quickly it could all be torn down. The fact that just this physical creation, you know, could be destroyed that took years and years and years to do, to conceive, to plan, to execute. I guess, again, it's like us, you know. We're, it takes us a lifetime to create the person we are and can be wiped out in a single mistake or accident. And so it is with cities and buildings.

William Langewiesche, Journalist: I think it's precisely like death. I mean, death of someone you know or someone you love. I don't know how many people loved those buildings, but certainly a lot of people knew them. And then they were gone. I mean, how can it be that something that extreme can happen so quickly and so irreversibly? Can't we just kind of reel that backward a little bit? No, we can't. We can't do it any more with those buildings than with death, and I think the emotional reaction is very similar. This was a public death.

NARRATOR: On a perfect, almost achingly beautiful late summer morning in early September 2001 -- a day of "seemingly infinite visibility," one man later said, characterized by the rare and exquisite flying conditions airline pilots call "severe clear" -- life in New York and much of the rest of the contemporary world was changed irrevocably, in the space of less than two hours.

Pete Hamill, Writer: In my years in New York, there's obviously nothing like it, nothing comes close. As a newspaper man, I've seen other horrors, wars, and the earthquake in Mexico in '85, which killed 20,000 people. But that was an act of nature, not of man. The combination of the death, the spectacular event of the two skyscrapers collapsing, and the motivations behind it all those things, I think, made this something that just struck a knife right into the heart of every New Yorker, knowing that we'd never be able to look at our city the same way again.

Kenneth T. Jackson, Historian: First of all, it's a surprise, on a beautiful day, at the center of this powerful nation, which has not been attacked on its own shores or its own land by a foreign power in almost 200 years. So that's a new thing. Secondly the public focus on this. Never in the history of the world has there been anything even close -- there's not really a second place. The second place would probably be the assassination of President Kennedy you know, a world event where the world is focused on that story -- but nothing like this, where it's seen instantaneously as it happens by tens of millions of people around the globe.

NARRATOR: In a little less than two hours -- with an almost poetically horrifying symmetry -- the symbols and instruments of the city's uniquely air-minded culture, and of globalization itself -- skyscrapers, jets, and the mass media -- would be turned back against themselves with a devastatingly lethal impact and effect.

Paul Goldberger, Architecture Critic: We were utterly struck by the fact that nothing here fit with any prior experience. Of course people were talking about how it looked like something in a disaster movie. We could only think in terms of life imitating art, because we had no other thing to compare it to. So people went to the movies and compared it.

NARRATOR: Around 8:45 a.m. on the morning of September 11th, 2001, people along the west side of Manhattan heard the piercing whine of a jet plane moving south down the Hudson.

Everything about its trajectory was wrong. Heading south along an airway normally reserved for northbound traffic, it was moving much too fast and much too close to the ground -- nearly 500 miles per hour, at an altitude of just 900 feet -- more than twice the speed permitted for aircraft that low.

It took less than 90 seconds for American Airlines Flight 11 to hurtle the entire length of Manhattan Island.

A little after 8:46 a.m., the huge 137-ton Boeing 767 aircraft -- measuring more than half a football field in length from wingtip to wingtip, and carrying more than 9,000 gallons of highly inflammable jet fuel -- flashed across the final 20 blocks from Canal Street to the World Trade Center, and tore through the north wall of the north tower between the 94th and 98th floors -- instantly killing everyone on board, and wreaking incomprehensible carnage across five full floors of the building.

Witnesses on the upper floors of the south tower were stunned to see a wall of flame burst through the south windows of Tower One 130 feet away -- followed by a shower of disintegrating desks, files, furniture, computer terminals, airplane parts and burning bodies.

James Glanz, New York Times Reporter: If you were just below where the plane hit, your ceilings fell, you saw the glint of the plane going overhead. There's an overwhelming feeling of terror. And you were probably knocked off your feet. And of course, if you were in the zone itself, you may have died instantly. But even very close -- and this is very tragic -- very close to the regions of impact there were people who lived for long minutes as they sought refuge from, you know, the building flames, the tremendous heat. A couple of them even were able to phone. And then often in that region their lives ended quickly in the fire, or they chose to leap from the tower.

William Langewiesche, Journalist: That airplane straddled several floors. And it delivered a hell of a punch. The building swayed. We know that when that punch was delivered, the swaying took the form of waves that ran vertically up and down the building multiple times, sort of echoing up and down the building. And really the incredible thing is, considering the speed with which those airplanes were flying -- enormous weight, enormous speed -- rather than decapitating the buildings or pushing them over the buildings absorbed the impact entirely. They took the hit and they stood.

Guy Tozzoli, President, World Trade Center Association: I was heading for the Holland Tunnel, which has a four-block concourse if you want to call it, leading to the tollbooth. And as I turned into the first of those four blocks and I looked up. I said, "Oh my God." There was a hole in tower Number One. And my first thought was, "It can't be a helicopter. The hole's too big." And the second was, "My God, it can't be a commercial plane, because they're instructed to fly into the river if they have problems." I knew that.

NARRATOR: By 8:55, an army of firemen, police officers, emergency medical personnel, and government officials, including the mayor himself, had begun to descend on Lower Manhattan -- along with an army of reporters, photographers and television crews -- as the machinery of the largest media apparatus in the world began to focus on the 16-acre site.

At 9:02 a.m. -- little more than 15 minutes after the attack -- millions of people in the metropolitan region, and tens of millions more across the country and around the world -- were staring intently at the smoldering skyline of Lower Manhattan -- when a dark shape appeared on the horizon above the New Jersey lowlands, and came hurtling across the upper bay.

Guy Tozzoli, President, World Trade Center Association: I got out of my car. Other people did. And suddenly I saw plane number two coming from the south, over the Statue of Liberty, going very fast. They say between 500 and 600 miles an hour. And I saw it smash into the south wall of Number Two, an oblique angle. And I saw this big ball of flame. And the nose came out on the north side and then the east side. And my first reaction: "My God, those poor people above, because they're going to wipe out all the staircases and all the sprinkler systems." That airplane just went-- sliced right through it. And the power of such a big plane at that speed. And for a moment, incredible sadness for the people there. And then incredible anger, feeling that somebody had deliberately, deliberately rammed into those towers, and those poor innocent people that were in there.

Pete Hamill, Writer: I was at the Tweed Courthouse on Chambers Street, right behind City Hall and I grabbed a notebook and ran to the street in time to see the second one hit and knew right away, obviously, it was terrorism. This amazing fireball that came roaring towards Broadway, and people on the street corner just going, "Oh, shit. Oh, shit. Oh, shit." That expression must have been uttered like 10 million times that day just astonishment at what they were looking at.

William Langewiesche, Journalist: We know that when the airplanes hit there was an instantaneous release of energy in the form of fuel, vaporized, that caught on fire. There was fire instantaneously across multiple floors. That fire, which was a kerosene fire, a jet fuel fire, burned very hot, but it also burned very fast we're talking three to five minutes. But what it did is it ignited a simultaneous office fire in both cases, across multiple floors -- an office fire the like of which had not been imagined before. In all cases, an office fire is many things burning -- partitions, carpets in particular, computer cases -- but paper. Mostly paper. And if you look at the dynamics of the collapse, what you find is that in both cases it was the paper fire that was sustained long enough, because of the amount of paper in there, to cause the steel to weaken, to cause the collapse and the hammering down in both cases. I mean, paper on that day was a constant presence. It rained down on the city, as if in mockery of the kind of business that was done at the Trade Center. "Here, have some of the paper." And it burned, and it brought the buildings down.

NARRATOR: The second plane had struck the south tower at 9:02:54 a.m. -- just 16 minutes after the first plane went in.

By then, the first teams of firemen and rescue workers had already arrived at the foot of the north tower -- where they were greeted by a scene of horror and devastation that defied the imagination.

On the Austin Tobin Plaza, there were corpses everywhere -- the mangled bodies of men and women who had already jumped or fallen from the upper floors of the building, and the charred remains of passengers from Flight 11, some still belted into their seats.

Far above, meanwhile, in the upper reaches of the towers themselves, the gaping black holes where the planes had gone in marked a stark dividing line between life and death.

Eric Lipton, New York Times Reporter: In the north tower, the plane struck at the center. And it also struck much higher up. And because it struck at the center, the fuel immediately went down the shafts and created a much broader fire. The flames were much more intense. The number of floors that were available to move up and down were many fewer. So what happened was people were breaking windows in the north tower, desperate to get air, and there was no place to go, because there were no stairwells that were open up and down. People were stacked four or five on top of each other at the broken windows, desperate to breathe. And other people were hanging on to each other across the steel columns, from window to window, hanging out of the windows, desperate to breathe, and just, you know, grasping each other to keep hold of the building.

James Glanz, New York Times Reporter: One of the most horrific scenes in the history of the nation took place a thousand feet above Lower Manhattan, and it took the lives of people who were staring down at safety, you know, at the most populous city in the nation, civilization at its peak. But they didn't have any way to get there. And there's really few words to describe how terrible that must have been.

NARRATOR: By 9:30, ordinary life had all but ceased across the city -- as millions of New Yorkers and hundreds of millions more around the world looked on in shock and disbelief at the nightmarish images unfolding in real time on TV.

Camilo Jose Vergara, Photographer: You usually can gauge things, you know, within a few minutes, you know, so that they may start getting worse, but at one time you say, "Well, this is what they are." But this was something that started getting worse and worse and worse and worse and worse and worse.

NARRATOR: At 9:38, word came that terrorists had commandeered a third jet liner and crashed it into the Pentagon -- killing everyone on board and 126 people on the ground -- and, not long after, that a fourth plane had crashed into a hillside in rural Pennsylvania, brought

down by some of its own heroic passengers before it could reach its intended target in the nation's capital.

Kenneth T. Jackson, Historian: What struck me at the time, I think, as the most significant part of that was when they came on and said that the Federal Aviation Administration had ordered all air traffic in the United States to be grounded. I knew that had never happened before. You know, there are tens of thousands of planes in the United States at any one time. And to say, they have to land now. What hit me was that this is really beyond whatever I had thought.

NARRATOR: And then -- on a morning of hideous surprises already without precedent in the city's history -- something happened that no one had ever thought possible before -- something beyond comprehension -- something that had never happened in the history of tall buildings since the first skyscrapers had gone up at the foot of Manhattan over a century before.

High up in both towers, the raging fires were now generating three to five times the heat of a nuclear power plant, and the interior temperature had soared in places to nearly 2,000 degrees Fahrenheit.

At 9:58 a.m. -- having withstood the ferocious heat of the inferno within for nearly an hour -- the steel floor trusses on the 80th floor of the south tower itself began to give way, columns along the east wall began to buckle outwards, and the entire tower began to come down. As the quarter mile tall structure dissolved into a massive shroud of smoke and dust, thousands of people in the surrounding streets began to cry out in horror and disbelief, then ran for their lives, pursued by an enormous billowing cloud of dust and debris.

Pete Hamill, Writer: It never occurred to me that these two buildings would come down. So that when they did, it was the most shocking moment maybe that I ever had, that the south

tower began to tip forward, and then righted itself and came down in what in memory seems like a slow motion moment but happened in 10 seconds, 10 seconds, it's a knockout in boxing. The whole thing came down. It was just, to me, still it's a staggering moment in New York, in any history, in world history, for a place that had never had anything like that happen to it ever before. The Empire State Building didn't come down. You couldn't -- '93, the 4,000 bomb, pound bomb goes off in the basement, doesn't come down. This time it came down. This time they figured it out. And I thought, "Oh, man, something new has happened here."

NARRATOR: At 10:28 a.m., 30 minutes after the south tower fell, the television antenna atop the north tower began to give way, followed a fraction of the second later by the upper floors of the building itself, as the entire north tower now came down, too.

William Langewiesche, Journalist: And there was a release of heat that was off the scale. Fires ignited. Crushing and tearing was going on. And chaos, mostly just chaos on some mathematical level was happening. You can't even describe it physically because it was too big, too chaotic. It was a cataclysmic release and it released back into the city in 10 seconds, in each case. The surprising thing to me has always been how concentrated it was they came straight down, as if they were aimed directly at their foundations and of course anything that was directly underneath, no longer existed afterward. The so-called bathtub that ran six floors underground below street, and absorbed the brunt of the energy. Inside that bathtub, during those twin 10-second pulses, what was really happening, nobody can even imagine. We know what the results were. The results were, we were grappling with results inside that hole for the following nine months. We're in a sense probably will be grappling with the results for years to come.

Philippe Petit, High Wire Artist: I was upstate New York when I heard of the towers being destroyed. A side of me was not believing it. It was a very strange blend of feelings. One was the sorrow, the horror at witnessing human life being obliterated for no reason like that. And I felt something beyond words. I felt almost an alive part of me being squeezed to nothing,

being extracted, an evisceration almost. It's an interesting question, when you saw those two giant towers collapse almost cleanly on themself: Where did they go? I have read in some architecture article that they were made mostly of air -- if you consider the space between the solid molecules, the steel, the concrete, the glass, the aluminum -- there was a lot of air. Was mostly air, actually. And they disappeared. It was. "Where did they go" was part of the disbelief that I was feeling. Because how you can make 200,000 tons of steel disappear? It's unbelievable.

NARRATOR: In the end, the half million tons of concrete, steel, glass and aluminum in each tower had hurtled to the ground in a virtual free fall -- traveling at a speed of 125 miles an hour. Shock waves from the twin impacts were picked up more than 40 miles away, by seismic instruments used for monitoring earthquakes.

The immense columns of rubble and dust drifting away from ground zero could be clearly seen from outer space.

Leslie Robertson, Engineer: I have to tell you, I didn't know whether the buildings were empty or whether there were tens of thousands of people in them. I just had no idea. And I was totally devastated by the fact that all those people were in there and this building that I had designed was perhaps falling on them. The buildings were not so important to me. I'm good at buildings, but people are another matter. It was a terrible event. Absolutely terrible.

Ada Louise Huxtable, Architecture Critic: I don't think you can measure the impact. It's absolutely enormous. Everybody felt it. But, of course, those who felt it most and will never get over the effects are those who lost people. And the sheer numbers are so appalling, and the horror of the attack is so appalling that in one sense, New York will never be the same.

NARRATOR: With the collapse of the second tower an eerie quiet descended on New York.

By 11 o'clock, hundreds of thousands of dazed and disheveled office workers, many covered in ashes and dust, could be seen marching north from the financial district, straggling uptown along the West Side Highway or heading over the bridges to Brooklyn.

Down at the site itself, hundreds of firemen and rescue workers groped their way across a surreal landscape of smoke and flames at the edge of an immense, seven-story pile of tangled steel and debris, searching desperately for any signs of life.

All day, doctors and nurses in emergency rooms around the city braced for the anticipated onslaught of injured survivors -- that never came. "Those who got out got out," one nurse later said. "Those who didn't, died."

Kenneth T. Jackson, Historian: The story of all the fire fighters is dramatic. What struck me about Rescue Two in Brooklyn is that even though a little fire house set out kind of in the middle of the Brooklyn borough, they were at the World Trade Center when the second plane hit. And since that's only about 16 minutes, they had to take, you know, must take a minute or two for the alarm to go out, it's got to take you another minute or something to get your shoes on and to get on the truck. And then to go through Brooklyn at rush hour, in the morning, and go through the Brooklyn Battery Tunnel and be at the World Trade Center in 12 minutes, by the way, where they all died, is an incredible story.

NARRATOR: Around 5:20 in the afternoon, Building Number Seven, a 40 story tower on the north side of Vesey Street, succumbed to a raging oil fire within, and fell to the ground.

William Langewiesche, Journalist: One of the surprising things, you could call it almost a sad poetic justice, is that the only buildings that were completely destroyed by this collapse were the buildings that carried the Trade Center label, buildings One through Seven. No other buildings, with the exception of the small Orthodox church there that dissolved, were destroyed. And every building that carried the label, died.

NARRATOR: Night fell, and an end finally came to the most harrowing day in the city's history.

Across the city, friends and family members of those thought to have been in the towers continued to roam the streets, or make the rounds of hospital emergency rooms, anxiously looking for loved ones who had not come home.

When asked on television about the future of his city, Mayor Rudolph Giuliani replied without hesitation. "We're going to rebuild," he said. "We are going to come out of this emotionally stronger, politically stronger, much closer together as a city, and we're to come out of this economically stronger, too. The people of New York City will be whole again."

Pete Hamill, Writer: The day itself was a horror, and yet that day itself, when, you know, the president couldn't be found, there was the mayor down at the site helping solve the way to think about it. When he was asked about how many casualties there would be, he said, "More than any of us can bear." That was the most important sentence by a public figure, because it put sorrow into the story, not just empty rage, not just, let's go kill somebody back, which a lot of people felt, including me. But he created a note there that said, "Wait a minute, we have to think about this as humans and what it did to human beings."

NARRATOR: Initial estimates of the number of dead ranged as high as 20,000.

In the weeks and months to come, the number would steadily dwindle, until the final confirmed toll of those who died in the attack on the World Trade Center stood at 2,792 men, women and children -- including the 156 passengers and crew on board the two doomed aircraft.

In the end, it had been the second deadliest day in American history -- surpassing the casualties of Pearl Harbor, D-Day, and all the battles of the Civil War, accept Antietam. Included in the overall total was one particularly staggering figure. Three hundred fourty three members of the New York Fire Department had lost their lives that day, including much of the department's top leadership. No fire department in history had ever suffered anything remotely like it.

Mario Cuomo, Governor, 1983-1994: We lost all those firemen. We lost police. We had this fantastic contradiction of people who hated you so much that they were willing to give up your life to take yours, and people who loved humanity so much that they were willing to run into the darn building, in the smoke and flame and -- just to save the life of somebody they never met. And that's ineffably beautiful. There's no better definition of "love." There's no more inspirational, no more inspiring, no more near to saintly conduct that you can think of, than what they demonstrated.

Kenneth T. Jackson, Historian: But I'll never forget where I was, and I'll never forget that day, and I remember taking a bus home at night at about 11:30 at Amsterdam and 116th Street and how quiet the street was. There was an eerie silence like nothing I'd seen in more than 30 years of working there. And I remember a huge truck coming south on Amsterdam with a yellow flashing light. And as it moved pass, you could see it was a giant truck carrying earth moving equipment obviously heading for the World Trade Center site. And then I remember when the bus came that there was a sign around the little box there that said, no fare today. And I remember sitting on the bus, sitting opposite a young woman who was just crying. And I remember when I got off the bus at 83rd St. she was still crying. I remember just putting my hand on her shoulder. And I said nothing. And she said nothing. And I got off. But I'll always remember that woman.

Pete Hamill, Writer: I went back that first night in the middle of this ghastly scene, where you could still see the fires burning at the end of the street. Everything was dark with these

huge buildings all black silhouetted against black and as the the first lights began to get hooked up, and they're sort of crude halogen lamps in come a lot of these cars from different places. And for the first time you began to see the iron workers, the hard hats, showing up with their tools, with their hats, and saying, "We cut steel. You're going to need us." And I knew that night that we we're going to be alright. This was like some moment in the blitz where citizens came out and began to dig the rubble. And these guys knew what to do. They were professionals. Some of them, I'm sure, that showed up in the next couple of days had helped put the towers up. And they had lived long enough now to see them come down. They knew how they were put together, and they were going to help de-construct the rubble.

NARRATOR: On the morning of Wednesday, September 12th, 2001, New Yorkers woke to what was perhaps the bleakest dawn in the city's long history. Overnight, the reality of what had happened had begun to sink in, and hope that many could have survived the twin collapses had all but vanished. The numbers were simply unimaginable, and as the mayor had said, more than anyone could bear.

One financial firm in the north tower, Cantor Fitzgerald, had lost nearly 700 people. The Port Authority -- which had built the vast complex, and whose offices had occupied 18 floors in Tower One, had lost 84 people, including its own director.

William Langewiesche, Journalist: We know that many Port Authority people were killed. We know that the entire headquarters was wiped out. This was for the people within the Port Authority a blow of unbelievable dimensions, psychologically.

Kenneth Holden, Commissioner Dept. of Design and Construction: It was overwhelming. I mean, it was, it was really overwhelming. No one, you know, we build libraries, I build, you know, $40 million sewer, water main, road projects. This is way beyond anything I had ever come in contact with, anything that I had ever experienced at all. And it was, obviously, it was very, very disturbing and just extraordinarily sad.

NARRATOR: Though the exact number would not be known for months, nearly 3,000 people lay buried within an apocalyptic wasteland of tangled steel and concrete, rising in places to jagged peaks more than eight stories high, and smoldering with subterranean fires.

And yet from that sorrowful, daunting landscape something extraordinary would begin to emerge -- from the very start something that spoke of the very best that the city and country were capable of, and stood for.

Pete Hamill, Writer: That we were able then, in the following eight months, to clear more than a million tons of steel and rubble and human bodies and remains and all that, and do that in eight months without losing a single person was to me this amazing human triumph that we were able to say, we had this terrible day in our history and we're going to distinguish ourselves by the way we solve it. And I think that the city has never been better than it was in the way it went about the "after" part. I mean, it was a gigantic improvisation. There was no script. And they found the script, you know, they knew how to do it. Everything in their lives in some way must have led to that 16 acres in Lower Manhattan, where they proved the value of what they do for a living, but also the sheer intelligence that's behind it. And this is a place that demanded intelligence and got it, and got it in a way that we'll be proud of for generations.

NARRATOR: Over the next nine months, the unbuilding of the World Trade Center -- a feat of improvised urban renewal unlike anything the city had ever seen -- would rival, and in some ways surpass, the extraordinary collective achievement that had raised it into the sky.

Week after week, month after month, the vast chaos of the pile slowly receded, as an army of ironworkers, crane operators, demolition experts and engineers grimly soldiered on -- working around the clock in shifts of eight to 12 hours -- a Herculean effort made incalculably more difficult by the fact that the work site was also a burial ground.

Kenneth Holden, Former Commissioner, Dept. of Design & Construction: I mean, it was just, it was a horrible place to work, it was a horrible place to work. We were putting milled asphalt, you know, to kind of build a road and flatten certain areas and put dirt over the debris, so we could bring trucks in and whatnot, then to have a firefighter come up and say, you know, "Look, I'm sure my son is in this pile of debris here. Can you just give me a couple of hours, and I'll search through this" and then out of the corner of your eye, to see this guy standing on the pile with a spade, I mean, he had a typical gardening spade and was searching for his son by getting spadefuls of debris and lifting it to his nose to smell, to see if he could smell, you know, putrefying flesh, put a human face on a tragedy, that's very haunting.

Ed Koch, Mayor, 1978-1989: On the Memorial Day a year later, Mayor Bloomberg asked a number of people to read some of the names of those who had been killed at the World Trade Center. And while we were waiting to go out I talked with one of the -- these people who was going to read. And he told me this story. He said, "I was in Wisconsin when the attack occurred and as it was happening, I knew," said he, "my daughter was at that very moment in a job interview with her employer in the trade tower, and I went crazy, you know, in pain," and so forth. As he's telling me this story -- I'm reliving it now -- I began to cry. He said, "We tried to get a plane, commercial. We couldn't. We tried to get a private plane. We couldn't. And finally we got into New York. And we went down to the site. We were taken over by a cop who will never be forgotten by us. He's now a member of our family. And he took us everywhere. We went to 38 places, looking for our daughter. And we knew she was dead." At that moment, Senator Hillary Clinton saw me and she motioned me to come over. And she said, "You look terrible. What's wrong?" I said, "I'm sitting with the father of a young woman who was killed." And I began to cry again, again, cry again. But it's like a personal, tremendous loss. And what the father said was -- he was so proud of New York, and appreciative. He said, "I can't tell you how I appreciate what the mayor did." And I told him 'I can't sit here. I have to work. I have to do something.' And he said, 'Sure, you must work.' And

he embraced me." He said, "I'll never forget him." Well, I'll never forget him either, and the pain that he went through, and -- just incredible. And the strength that he displayed.

Mario Cuomo, Governor, 1983-1994: Teilhard de Chardin, great French Jesuit paleontologist and a philosopher, said that one of the tricks in life is to convert everything into good. He makes the reference of the stone. You're a sculptor and you have a stone, and the stone has a scar in it. And well, all right, so now you have to sculpt around that scar and you've got to use that scar to make it part of whatever it is you're going to produce that's beautiful, and work with what you have. Play it as it lies. You know. So whatever the circumstance, you know use it for good purpose. Nine-eleven, how can you possibly use it for good purpose? You think about it. You'd think, as was suggested before, you'd think about: Look, what this reminds you of is the importance of your own life, and making the most of it, because you can lose it in a flash. And if that's all you learned from 9/11, that's all you remembered, that: My God, you could extinguish life so suddenly, so unexpectedly, and it could happen to me, and therefore I should think harder about the way I spend my life instead of just wasting it. Now, it's not going to teach you what to do with your life, but it will teach you to do with your life, and to do it more and quicker and better. And that can be extremely valuable. I -- It's had that effect on me.

Paul Goldberger, Architecture Critic: We are never going to be exactly the same again, those of us who lived through this. We can't be, in the same way that if you live through the Kennedy assassination or other, you know, cataclysmic events that had just a powerful, wrenching emotional effect on people, you are not quite the same. But everything isn't really different either. There is a glorious comforting power to normalcy, that ultimately pushes its way back in. It's kind of like, you can do anything you want in the sand on the beach, but ultimately the tides will sort of work their effect on it, and smooth it over. And sometimes we almost don't want to let it do its work because we fear that in some way maybe that's disrespectful of those who died or those who suffered so much, to let normalcy come back. But ultimately it's the law of nature, in fact, that normalcy return. I think it's also true that

there is a fundamental kind of New Yorkness that cannot be destroyed by even as cataclysmic an event as this. And our day-to-day business ultimately came back. The business of living, the feeling of living, what city life is like. And that was not destroyed by 9/11. It's in fact the New York equivalent of the tides. It's just there, and ultimately it sort of works its magic of normalcy again. But we will never be exactly as we were. And that's right. It would be wrong to deny the enormity of what's happened. But that doesn't mean everything changes as a result.

Camilo Jose Vergara, Photographer: I really liked them, you know. I really liked them. I miss them. I see them right now -- none of the other buildings -- had the power and presence of those towers.

Ada Louise Huxtable, Architecture Critic: When you ask someone what they'd like to see there I know that the answer to that question is, something you and I have not thought of, something that has far more dimension, far more connection with the city, far more beauty and utility, far more originality than we're capable of dreaming of.

Robert Stern, Architect: But should one build tall? Yes, I think so. Otherwise, the forces of darkness will have won. I mean, they were attacking our ability to challenge the sky. Ever since the biblical times, to build tall has been both the arrogance of man and the confidence of man. So we must build again.

Leslie Robertson, Engineer: Not 110 floors, but not 109 either. Maybe 111 or whatever. And I don't care whether it's the tallest building in the world or not. I don't think that's the issue. But I would like to see there a symbol of the city of New York that is as strong or stronger than the symbol that was there before.

Mario Cuomo, Governor, 1983-1994: I would like to see some depiction of all the religions list them all: atheism, ethical humanism, Catholicism, etc., etc. All of them. And you notice

that each of those religions, these value systems, have two principles they share in common. And the two principles started with monotheism and the Jews: *tzedakah* and *tikkun olam*. *Tzedakah* means generally: we must treat one another as brother and sister. We should show one another respect and dignity, because we are like things. We are human beings in a world that has nothing else like us. And we ought to treat one another with love, charity-use your own words. And the second principle is: Well, what do you do with this relationship? Well, we don't know exactly how we got here, why we got here, etc., etc. That's for minds larger than ours. But we know that we are like kinds, and we should work together to make this as good an experience as possible. Tikkun Olam -- let us repair the universe. Now Islam believes that. Buddhism that has no god believes it. Every ethical humanist I ever met believes it. Those two principles: we're supposed to love one another and we're supposed to work together to make the experience better. That's all the religion you need, really, to make a success of this planet. And I'd like to see that in 9/11 somewhere. I'd like to see that captured somehow.