

PDHonline Course S255 (4 PDH)

# **Chrysler Building: Race to the Sky**

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## **PDH Online | PDH Center**

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"French taste was law... Why? Because all around us the English, Germans, Belgians, Italians, Scandinavians and even the Americans themselves reacted and sought to create for themselves – for better or worse – an original art, a novel style corresponding to the changing needs manifested by an international clientele ... "

Lucien Dior – French Minister of Commerce







"All that clearly distinguished the older ways of life was rigorously excluded from the exposition of 1925" Waldemar George











"In 1900, we saw the triumph of noodling ornamentation. Today we have the pretense of doing away with such ornament - but it is only a pretense. We no longer speak of 'the right line' or 'the essential thing' or of construction. Instead, to take the matter as it really is, today the ornament has become the essential thing with the result that we have more useless ornament than ever before. The same motifs appear again and again in contemporary commentaries: art deco is superficial and merely replaces one decorative vocabulary with another.' Marie Dormoy









"To deny decorative art, and to affirm that architecture extends to even the most humble piece of furniture, to the streets, to the city and to all"

Le Corbusier, Architect

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"Art Deco" (extracted from the French name for the 1925 Paris Exposition: Internationale Exposition Des <u>Arts Decoratifs Et Industriels Modernes</u>) began in France featuring exotic materials and cultures (i.e. shark-skin, ebony, African, Egyptian, Aztec etc.). When it came to America, it had three distinct phases; The Zig-Zag era (of the late 1920s into the mid-1930s), the WPA (Work Progress Administration – A "New Deal" agency) era (early 1930s to WWII) and the Streamline era (from the mid-1930's to the late 1940s. There were variations and hybrids of these three essential styles that can be seen in the designs of the period. The Chrysler Building would be very much of its era (Zig-Zag), but was also influenced by the French Exotic style. <sup>24</sup>



Egyptian Temple Entrance The highly decorated surfaces and geometric shapes of ancient Egyptian art and architecture were a great influence on the French/Exotic and other styles of Art Deco<sup>25</sup>



















Barclay Vesey Building Ralph Walker, Architect Considered the first Art Deco Skyscraper in New York City (1926)







Chanin Building 122 E.42<sup>nd</sup> Street, NYC The base of this building (completed in 1929) was executed by French architectural sculptor *Rene Paul Chambellan* in a classic French/Exotic Deco style

















"Between the purely commercial products of Art Deco, the Odeons and the Roxys, and the more serious, high-minded Modernism of Gropius and the Bauhaus, there is a middle ground which shares something of both...for the architects, ornament was no crime for they believed in the future (or at least the present) ... the new materials; steel, glass, reinforced concrete, were an opportunity, not a discipline. They favored the curve rather than the straight line of Streamlined Moderne; it was chic, it was up-to-date, it was avant-garde with a touch of elitism, the perfect background for the jazz-age" lan Sutton, Author



"One of the first uses of stainless steel over a large exposed building surface. The decorative treatment of the masonry walls below changes with every setback and includes story-high basket-weave designs, radiator-cap gargoyles and a band of abstract automobiles." AIA Guide to NYC RE: The Chrysler Building 46







It teems with the spirit of modernism, it is the epitome of modern business life, it stands for progress in architecture and in modern building methods. Kenneth Murchinson, Architectural Critic















While America laid claim to having built the first Skyscraper, it was British architect Charles Burton who first submitted a design for a Skyscraper. The design was published in The Builder in 1851/52. Burton's design called for "stacking" an iron frame 50-stories high (1K-feet or 305meters) and covering it with glass. The design was in response to a competition to redesign the famous Crystal Palace exhibition hall (of 1851) in London (it was relocated) 56





"It must be tall, every inch of it tall. The force and power of altitude must be in it, the glory and pride of exaltation must be in it. It must be every inch a proud and soaring thing." Louis Sullivan, Architect RE: Skyscrapers







"He reached a snag early one afternoon and found himself looking out his office window in frustration. Rather than continue to torture himself he went home for the day. His wife was startled to see him so early and thought he might be ill. Getting up suddenly from her chair where she was reading, she looked around for the most handy place to set down her book, and accordingly laid it on top of a bird cage...Jenny jumped with surprise when he noticed that this lightweight bird cage could support a heavy load without the slightest difficulty. Back to the office Jenny went with the clue to the skyscraper – 'cage design.'"

#### George Douglas, Historian

RE: Relating how architect William LeBaron Jenney "discovered" the iron framework which would make the skyscraper possible. He used wrought iron for the world's first skyscraper – the 10-story *Home Insurance Building* in Chicago (1883)





"Like a human being in its organizations...it has its skeleton of steel, its arteries through which courses heat; its soil pipes for the elimination of wastes; its veins which supply its water, its tingling electric nerves of sensation and communication which make possible the stream of pulsing life. It has in its outer walls of masonry its clothes, on which are its details of decoration and adornment" Alfred Bosson, British Architect









"It is not easy to imagine the feelings of a New Yorker exiled for a period of ten or twelve years – no more – who is returning to his native land by one of the ocean steamships. As he looks about from the deck of the vessel as it steams up the bay, the first glance that he obtains of the lower part of Manhattan island will probably be, if he has not been forewarned, the greatest surprise of his life." William Birkmire, Engineer RE: By 1901, 300 buildings rose nine stories or higher – some to 20 stories











"The bravest thing in New York is a blade of grass. This is not prize grass, but it has moxie. You need plenty of moxie in this man's town, or you'll soon find yourself dispersed hither and yon." Damon Runyon, Writer

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"Vertical architecture would be impossible. First of all, without the elevator; the great equalizer of civilization, which by excessively rapid 'express service' makes the 20<sup>th</sup> floor scarcely more difficult to access than the third...the chief merit of tall buildings would be gone; without it its upper stories would be as inaccessible as a mountaintop" Barr Ferree, 19<sup>th</sup> Century architectural

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Hydraulic Elevator Elijah Otis installed the first elevator in a building in New York City in 1852. Prior to that time, elevators were limited to lifting heavy goods in warehouses, not people, since they were considered unsafe.





"If the high building would be impossible without the elevator, it would be equally impossible without a mode of construction that would enable it to be built on a lot of practically any size, and without absorbing too much of the area for foundations and supports. This is accomplished by the steel-skeleton system of construction, now almost exclusively used for commercial buildings of great height, and which has the double advantage of saving floor space and of being above the height of an ordinary structure of absolutely less cost than a construction wholly of brick or stone."

Barr Ferree, 19th Century architectural critic





"It may stand a short gust of wind blowing very hard, but if this were to keep up for any length of time, the cage might begin to sway. Then matters would be serious. The rivets would be cut off and the oscillations would increase with each swing backward and forward, soon wrecking the building." George B. Post, Architect

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RE: His doubts expressed to a NYT reporter concerning the viability of "Skyscrapers" in sustained winds. In particular, the *Tower Building* (a.k.a. *The Idiotic Building*) – NYC's first skyscraper



"Architects said nothing would be higher; engineers said nothing could be higher; city planners said nothing should be higher, and owners said nothing higher would pay" Harvey Wiley Corbett, Architect RE: World Building (a.k.a. Pulitzer Building) of 1890 beating out the adjacent Sun & Tribune Buildings at a height of 309 feet







"With the trees of Madison Square covered with fresh snow, the Flat Iron impressed me as never before. It appeared to be moving toward me like the bow of a monster ocean steamer – a picture of the new America still in the making...The Flat Iron is to the United States what the Parthenon is to Greece" Alfred Stieglitz, Photographer Re: Fuller Building (a.k.a. Flat Iron Building) at 23<sup>rd</sup> Street and Broadway (285-feet)

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completed in 1903



Interestingly, the term "Twenty-Three Skidoo" originates with the Flatiron Building. Because it is at the juncture of 23rd Street, Broadway and 7<sup>th</sup> Avenue, a wind tunnel effect caused lady's dresses to be blown above their ankles (on very windy days, above their knees). For this reason, men would gather at the "bow" of the building to catch a glimpse (or two). NYC passed an ordinance prohibiting two or more men from gathering at this juncture. If they did, the beat-cop would tap his baton on the sidewalk and advise them to "skidoo" (move-on). If not, they went to jail.





"There would be an enormous profit out-weighing any loss...The Woolworth Building was going to be like a giant sign-board to advertise around the world my spreading chain of 5 & 10 cent stores" Frank Winfield Woolworth **RE: Dismissing architect Cass** Gilbert's maxim that the purpose of a tall building was: "to make the land pay." FW was indifferent about costs and return on investment - he understood the power of the tallest building in the world for promotional purposes.



(counting the nickels & dimes he used to pay for the building) The Woolworth Building has the distinction as being the only large commercial building ever constructed in NYC to be paid for entirely in cash (no underlying mortgage)



"How high do you want the tower now?" asked Mr. Gilbert "How high can you make it?" Mr. Woolworth asked in reply "It is for you to make the limit" said Mr. Gilbert "Then make it 50 feet higher than the Metropolitan Tower' responded Mr. Woolworth RE: Exchange between F.W. Woolworth and architect Cass Gilbert concerning the height of his new building. MetLife had denied FW a much needed loan years before thus, he had a score to settle. 92









"Eighty-thousand lights instantly flashed through-out the Woolworth Building. The event marked the completion, the dedication and the formal opening of the real edifice, the tallest and most beautiful building in all the world...Assembled there was a great host of statesmen, captains of industry, merchants, journalists, scholars, poets – all representative Americans, proud to break with and honor the man who had realized his dream"

RE: April 24, 1913 – *Woolworth Building* opening (excerpt from brochure). At 7:30PM, President Wilson pressed a button in his White House office that lit the 792'-1" tower from top to bottom. 96



"Before us is spread the most exciting, wonderful, and instructive view to be had on our continent...East and North Rivers and the bay appear as if at our feet, with their myriad flotillas of the navigable world. Suburban Brooklyn, Jersey City, Hoboken, Hudson City, and Harlem are all plainly before us. Certainly not elsewhere in all New York can such another unobstructed bird's eye view be had from the open pavilions of the Equitable Life Assurance Society's Building." New York Sun 97





#### Equitable Building (1916) (shown as solid lines)

The dotted line indicates how it would have looked had it been built to the 1916 NYC Zoning Law which required set-backs (sky exposure plane) to allow light and air into the streets below. The Equitable Building was "the straw that broke the camel's back" (it cast a giant shadow for blocks all around). The Singer Building (1908) was seen as an example of responsible design. The 1916 Zoning Law allowed a building to rise as high as "technology and economics" would allow on 25% of the lot it occupied (as Singer's Tower did).













"Some time ago I got our engineers to figure up just what would be the theoretical maximum height for a skyscraper. It is 7,000 feet...I proposed a tower 2,500-feet high and nobody batted an eye" Raymond Hood, Architect (at left, his 1929 News Building)





Observation Deck – RCA Building (a.k.a. 30 Rockefeller Center) <sup>107</sup>







"It is seldom, except when some old and large holding comes onto the market, that an operation involving an entire block of property is at all possible. This is due mainly to the fact that the last property owner always holds out for the ultimate dollar, for which he cannot be blamed under the present system – or he flatly refuses to be drawn into negotiation of any kind." Irwin Chanin – Developer, 1930 RE: the increasing difficulty and expense to obtain large plots in urban centers like NYC (Chanin Building, 1929 at left)





William J. Reynolds – a former NY State Senator and developer of *Dreamland* in Coney Island, leased the future Chrysler Building site at  $42^{nd}$  Street and Lexington Avenue from Cooper Union. He then hired William Van Alen – a notable retail architect and former partner of H. Craig Severance to design a tower for the site. Originally, Van Alen planned a 56story tower to beat out the Lincoln Building (planned for 55-stories). J.E.R. Carpenter, architect of the *Lincoln Building*, upped the anty by adding first ten, then twelve additional floors to beat out Van Alen. Ultimately, the Lincoln Building topped out at 54stories, but the die was cast for the *Race for the Sky*.





"The design, originally drawn up for William H. Reynolds, was finally sold to Walter P. Chrysler, who wanted a provocative building which would not merely scrape the sky but positively pierce it..." From: Architecture in the Twentieth Century

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" I want a taller building of a finer type of construction and its your job to give the best that's in you. Improve upon them to the best of your ability, spare no effort or time...A bold structure, declaring the glories of the modern age"

RE: Walter Chrysler's directive to Architect William Van Alen for the design of the building to bear his name 116



"This is the story of how two architects - formerly partners, vied with each other to erect two of the world's tallest man-made habitable structures and how one of them, by an ingenious engineering device, finally succeeded in passing the hitherto thousand-foot pinnacle of the Eiffel Tower in Paris ... " Daily Building Report, November 1929 RE: 40 Wall Street architect H. Craig Severance and Chrysler Building architect William Van Alen - former partners in the architectural firm of Severance & Van Alen

"Our office is entirely organized, having the departments to furnish all of the services as outlined; and we have had a wide experience...of considerable magnitude with various clients to whom we take pleasure in referring you for any outside information regarding our qualifications for this work"

Severance & Van Alen, Architects







"Van, Van, you've just got to get up and do something. It looks as if we're not going to be the highest after all. Think up something. Your valves need grinding. There's a knock in you somewhere. Speed up your carburetor. Go to it!" Walter P. Chrysler

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"He examined his plans and right in the center of the tower he found a fire tower which, to the untutored mind, is nothing more or less than a large hole in a building. And there he went secretly to work. He and his engineer evolved a modernistic flagpole of lattice steel – they named the thing a 'vertex', because the name hadn't been used before, and they had it made in three pieces. They hoisted it up in the fire tower and there riveted it together." Kenneth Murchison, Architectural Critic

RE: The Chrysler Building's spire, a.k.a. "Vertex" which was based on an automobile's grille



"We'll lift the thing up and we won't tell 'em anything about it. And when it's up we'll just be higher, that's all." William Van Alen RE: Raising the vertex

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"When it was decided that the topmost part of this building should outtop every other existing structure, it was necessary to resort to the unusual because of its after-consideration nature. Such problems are the especial joy of engineers and constructors."

William Van Alen, Architect



"Van Alen's design for the building's crown was a sort of cruciform groin vault sliced in seven concentric segments that mounted up one behind the other. The whole complex swelled upward toward the center, and as they did their shapes were progressively distorted from a pure semi circle at the bottom to a thin parabola that stretched toward the Vertex" From: New York 1930. Architecture and Urbanism between the Two World Wars





The Chrysler building's terraced crown is composed of seven adiating terraced arches (on each face). It is a cruciform groin vault orming seven concentric members with transitioning setbacks (mounted one behind the other). The "Enduro KA-2" stainless steel metal cladding was ribbed and iveted in a radiating pattern. Many triangular vaulted windows ransition into smaller segments as they ascend the crown. Krupp of Sermany develeped the "austenitic stainless steel" and marketed it under the trade name Nirosta derived from the German "nie rost' meaning "never rust').







Mr. Frank B. Rogers, VP in charge of construction for the *Walter P. Chrysler Building Corporation,* holds the tip of the *Vertex* which would "top-out" the Chrysler Building at 1,046-feet, 4.75-inches



"The newest skyscraper will cost more than \$20 million and will have 63 stories. There will be 40 elevators. When fully tenanted, its population will be equal to that of an average sized town. Taking some of these statistics into consideration, you will begin to understand why the 'Seven Wonders of the World' inspire only a yawn in these progressive days." Shamokin Herald

RE: Announcement of the *Manhattan Company Building* to be constructed at 40 Wall Street



"There is no intention on our part to build this building, rent it and dispose of it; rather, it is a situation in which we all firmly believe and in which we have chosen to make a large personal permanent investment" George Ohrstrom, Bank of Manhattan President (a.k.a. "The Kid" – 34yo in 1929) RE: 40 Wall Street

"The proposed building may later be exceeded in height, for two are projected in Chicago of loftier measure, and a 100-story building has been planned for New York, but none of these buildings seems possible of completion before the time estimated to finish the Manhattan Company Building. Until any of them or some other not now projected skyscraper outstrips the Wall Street structure, its preeminence among skyscrapers must go unchallenged."

RE: Excerpt from the Bank of Manhattan monthly magazine May 1929

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"It is fortunate that up to this time, no attempt has been made by architectural delettanti to talk of an 'American Style' in city architecture. It is fortunate in as much as there is no such style, never has been and, in all probability, never will be such a

RE: Praise for H. Craig Severance's French Gothic crown for 40 Wall Street

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"Even in building a doghouse you find you have to make it larger because the dog's tail is longer than you thought it was"

Paul Starrett, President - Starrett Bros. & Eken (General Contractor for 40 Wall Street)

RE: Changes to add additional height in the Race for the Sky with the Chrysler Building

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NEW SKYSCRAPER RACE IS WON BY BANK OF MANHATTAN BUILDING PLANS ALTERED TWICE TO BEAT OUT CHRYSLER ... Manhattan Company Building, unlike the Chrysler Building, was little heralded at first and possibly by virtue of this fact was able to come through in a Garrison finish to win the battle of the tallest...The Chrysler construction is so far advanced further changes that are impossible RE: newspaper headline & byline Saturday, October 18, 193013

Begun in May, 1929 and scheduled for completion on May 1 1929, foundations for the new Wall Street tower were being laid even while the old building on the site was being dismantled. Working three shifts seven days a week, General Contractor Starrett Bros. & Eken completed 40 Wall Street on schedule. This despite the fact that the building's pyramidal top was made steeper and a 60-foot steel cap and flagpole increased the overall height to 925-feet. Severance had heard rumors in August 1929 that his ex-partner and rival Van Alen had increased the Chrysler Building's height to exceed the 808-feet originally planned for 40 Wall Street. Thinking they had won the race, Ohstrom, Severance and Starrett "jumped the gun" in claiming victory (in November 1929) to an audience of the downtown elite. First, Van Alen added an arch atop the steel dome which increased the height to 860feet. Still short of the mark, Van Alen had assembled in secret a 27-ton, 186-foot steel "vertex" that brought the Chrysler Building's overall height to 1,046-feet.



RE: Newspaper headline, November 1929

40 Wall Street owner George Ohstrom and his architect H. Craig Severance cried foul over Van Alen's" dirty trick" that won the sky race. They led a campaign to denounce the Chrysler Building as unworthy of the title: World's Tallest Building. To counter the slander, Walter Chrysler hired the famous female photographer Margaret Bourke-White to take photographs high atop his new eagle's nest.



"A stunt design, evolved to make the man in the street look up..." George Chappell, architecture critic for New Yorker magazine (Margaret Bourke-White atop one of the 61<sup>st</sup> floor "eagle gargoyles" in photograph)

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"....We cannot help feeling that all this sheet metal is part of some temporary construction to be covered up later with masonry" George Chappell, Architectural Critic. New Yorker magazine

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"...It gives the masters of our civilization an unusual opportunity to exhibit their barbarous egos with no sense of restraint" Lewis Mumford, Architectural Critic

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"The prestige of having the tallest structure in the world has sunk so deeply into the Parisian mind that recent press dispatches from Paris indicate that the French are considering adding sufficient height to the Eiffel Tower to make it surpass the 1,046 feet of the Chrysler Building"

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"The legitimate height of skyscrapers should be considered of the building only, in accordance with the building code, and shouldn't include the flagpole or the radio needle, so the Eiffel Tower still holds the crown for the highest structure, its observatory being 905 feet, 11 inches above grade. The Bank of the Manhattan Company's tower on Wall Street ranks second, its observatory being 836 feet, 5 inches above Wall Street grade. A good third is the Chrysler Building, its observatory being 783 feet, 1&1/2 inches above Lexington Avenue grade or 53 feet below that of the Manhattan Company.' Yasuo Matsui, Design Architect of 40 Wall Street 144







"Deep-sea divers in deep-sea depth are said to experience something called 'the rapture of the deep'. A diver's euphoria proves so overwhelming that he fails to return to the surface even when his air runs out. From the 84th floor of the Chrysler Building, the city below appears as dreamy, distant, and unnecessary as the mercury-colored surface of the sea must look to an enraptured diver." David Michaelis, Writer 147



"Chrysler's only sixty-eight stories, we're seventy. They put that flagpole, or whatever they call it, on the top, and it goes up higher, but you can't put offices in a flagpole, can you? We've got more construction. Clear up to the Penthouse, right under the pole, we've got space for things you have to put in a building like this." Starrett Bros. & Eken, General

Contractors of 40 Wall Street 148





"America is vindicated, and our national passion for the biggest, the tallest, the most stupendous, may gratify itself in the thought that at last we

RE: A Newspaper writer's editorial concerning the new Chrysler Building having attained the title of: The World's Tallest Man-Made



"History will record this age as the greatest of all so far as building is concerned" William Van Alen, Architect



"The Chrysler Building is dedicated to world commerce and industry. It was created with a desire to meet the demand of business executives of today who, with their sensitive activities, must have the most favorable office surroundings and conditions" Walter P. Chrysler

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### THE CHRYSLER BUILDING

A STUNNING STATEMENT OF THE OPULENT ART DECO STYLE BY ARCHITECT WILLIAM VAN ALEN, THE 77-STORY BUILDING SYMBOLIZES THE NEW YORK CITY SKYSCRAPER WITH ITS DISTINCTIVE STEEL TOWER. BUILT IN 1928-30, IT GLORIFIED THE AUTOMOBILE INDUSTRY WITH ITS FRIEZE OF BRICK AND STEEL CARS, EAGLES, AND GARGOYLES. THE ART DECO LOBBIES ARE AMONG THE FINEST OF THE PERIOD.

NEW YORK LANDMARKS PRESERVATION FOUNDATION

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"Everywhere was the atmosphere of a long debauch that had to end; the orchestra played too fast, the stakes were too high at gambling tables, the players were so empty, so tired, secretly hoping to vanish together into sleep and maybe wake on a very distant morning and hear nothing whatsoever, no shouting or crooning, to find all things changed." Malcolm Cowley RE: Stock market crash - October

1929, the end of "The Roaring '20s" and the great skyscraper races



Colonel William Starrett, Builder



*"I like to build things. I like to do things."* Walter P. Chrysler

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Walter Percy Chrysler was born in 1875 in Wamego, Kansas the third of four children. He was raised in the "Indian Country" of Ellis, Kansas and, as a boy, he was an avid reader of Scientific American magazine. In 1893 he entered a four-year apprentice program to become a locomotive engineer (like his father). After completing his apprenticeship in 1897, he took various jobs with railroads around the country as an engineer. Always wanting to learn new things, he took many engineering correspondence courses and married in 1900. By 1902, he was foreman over 90 men and was earning \$90/month, by the time he was 29yo (in 1905), he was a "Master Mechanic" in charge of 1000 men earning \$140/month. Eighteen months later, he was "General Master Mechanic" for the Chicago Great Western Railroad earning \$200/month. In 1908, he attended the Chicago Automobile Show and took a keen interest in a \$5K Locomobile on display. He put up \$700 and borrowed the rest in order to buy the car to study it by disassembly.



"I feel sorry for the person who can't get genuinely excited about his work. Not only will he never be satisfied, but he will never achieve anything worthwhile" Walter P. Chrysler





Chrysler went to work for the American Locomotive Company in Allegheny, PA. In 1912, he was promoted to "Works Manager" and was introduced to Charles Nash, then president of General Motors. Nash hired Chrysler as works manager for Buick at \$6K/year. He proved his worth immediately and production increased to 200 cars per day. By 1916, he was General Manager of Buick earning \$25K/year. Billy Durant offered Chrysler the presidency of Buick for a salary of \$120K/year plus \$380K/year in GM stock. By 1920, he was President of Buick and VP in Charge of Operations for GM. He resigned his position with GM after a dispute with Durant. Forty-five years old, he took a position for \$1 million/year with Willys-Overland, a company \$50 million in debt. By 1922, W-O's debt had been reduced to \$18 million. Chrysler was developing a new high-compression engine while at W-O, but they took no interest in pursuing it, this led to a break with W-O. He then took a position with Maxwell Motors, another manufacturer deep in debt.

the second secon

"Chrysler never lost contact with metal. When he saw a stalled car on the road, he'd often stop, get out his tool box and give aid. Then he'd hand the surprised people his card and suggest that, next time, they should buy a Chrysler."

Neal Bascomb, Author

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While at Maxwell, Chrysler completed work on his high compression engine. Studebaker tried unsuccessfully to by Maxwell Motors along with the new engine. To get the new car and engine into production required \$5 million – money Maxwell did not have. Chrysler secured a loan for \$5 million and sold the car under his own name for \$1,595.00/unit. The car was an immediate success selling 32K units in 1924 - the first year of production. A net profit of \$4,115,000.00 was made on the \$5 million loan. The car featured four-wheel hydraulic brakes, a replaceable oil filter and true 70mph performance. In 1925, Maxwell Motor Corp. was bought out by Chrysler. Walter P. Chrysler was now his own boss over his own company under his own name. By 1927, Chrysler was fifth in production at 192K/year. He struck a deal with Clarence Dillon, owner of Dodge - a competitor, and the Dodge Division of Chrysler Corp. was born along with a fivefold increase in production capacity. By 1937 Chrysler had 76K employees and was debt-free.







"When I hear the word 'Chrysler,' I see not a garrulous people-loving face nor a particular automobile design. I see the glitzy building that still says 'Big Apple' to me – and I catch a lingering glint of flashy chromium steel." Architectural Critic

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"Mr. Chrysler is a big man and would not be content in any city other than the biggest. Everything Mr. Chrysler does is done in a big way." Parker W. Chase

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"I was well aware that a rich man's sons are likely to be cheated of something. How could my boys ever know the wild incentive that burned in me from the time I first watched my father put his hand to the throttle of his engine? I could not give them that, but it was through this thinking that I conceived the idea of putting up a building." Walter P. Chrysler

RE: His motivation for the Chrysler Building. He was also vying with General Motors for supremacy in the auto industry. The "Tallest Building in the World" would help his cause as it had helped Singer, Met Life and Woolworth.





To me this building is a human thing" Walter P. Chrysler

RE: Chysler's sons; Walter Jr. and Jack, weren't very much interested in following his father's footsteps into the automobile business. As such, he personally financed the Chrysler Building and saw it as a business venture for his sons to inherit and run. Walter Chrysler died on August 18, 1940, never witnessing the great contribution the company he founded sixteen years earlier would make to the war effort. 175



"A procession of Murdstones, grim as a cortege, marched in and took control. The building suffered flogging after flogging, for each stepfather was more selfish and cruel and pitiless than the last, and each turned a cold shoulder as the building slid further and further into taters, misery, wreck and ruin." David Michaelis, Writer RE: Loss of the Chrysler family's control of the Chrysler Building by the 1950s

In 1957, real estate tycoons Sol Goldman and Alex DiLorenzo purchased the Chrysler Building from the Chrysler family. They in turn later sold the building to the Massachusetts Mutual Life Insurance Company. Under their stewardship (and thanks to a tax incentive), the lobby and façade were refurbished in 1978/79. All 3,862 original galvanized windows were found to be in excellent condition. The same company -Campbell, manufactured the 6,400 windows of the Empire State Building without a galvanized coating (they were painted "tomato soup red" instead for protection - all needed to be replaced due to corrosion). Mr. Jack Cooke - a Washington D.C. investor, purchased the building in 1979. In 1995, the spire underwent a restoration. Cooke's estate sold the building to Tishman-Speyer Properties and the Travelers Insurance Group in 1998. In 2001, TMW - a German investment group, purchased a 75% stake in ownership. In 2002, renovations were completed and in 1976 the Chrysler Building was declared a National Historic Landmark.













"He must have both a natural gift and also a readiness to learn. For neither talent without instruction nor instruction without talent can produce the perfect craftsman. He should be a man of letters, a skillful draftsman, a mathematician, familiar with historical studies, a diligent student of philosophy, acquainted with music; not ignorant of medicine, learned in the responses of jurisconsults, familiar with astronomy and astronomical calculations." Marco Vitruviuss Pollio, Architect to Roman Emperor Augustus Caesar RE: Excerpt from his treatise: De Architectura, defining the principles for training an architect





"The damage wrought to this country by the Chicago World's Fair (1893) will last half a century. It has penetrated deep into the constitution of the American mind, effecting there lesions of dementia." Louis Sullivan, Architect RE: Era of classical and neo-

classical architecture (Roman, Greek, Gothic Revival) of the late 19<sup>th</sup> and early 20<sup>th</sup> century



"It was torn by dissensions and jealousies, and its few members were engaged in a war of styles. The Medievalists could see no merit in classic art; the devotees of the Renaissance considered modern Gothic worthy of no considerations; and the Pre-Raphaelites believed in neither. The American painters and sculptors were frankly outspoken in their opinion that there was no art in Architecture." George B. Post, Architect

RE: Early days of the American Institute of Architects. The AIA was founded by Richard Upjohn; architect of New York City's Trinity Church. "Leading the modernists are Ralph Walker, Ely Jacques Kahn and Raymond Hood. They are three little men who build tall buildings, and who probably rake into their offices more business than any other architects in the city...They eat and drink and lunch and confer constantly...They plan great projects. They lead the Architectural League...They are constantly publicized, interviewed, quoted. They dash to Boston. They race to Chicago. They have a glorious time." New Yorker magazine

RE: NYC's leading "Modernist" architects

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New York's top architects dressed as their buildings Beaux-Arts Ball, 1931





William Van Alen (as the *Chrysler Building*) Beaux-Arts Ball, 1931

William Van Alen never had a signed contract with his client Walter Chrysler. He inherited all Van Alen's design work as part of the deal with Reynolds and paid him a very generous monthly fee during construction. Despite this, Van Alen came to Chrysler after the building was complete claiming he was owed 6% of the construction cost (the standard architect's fee then). Chrysler refused payment and accused Van Alen of taking bribes from contractors - litigation ensued. Van Alen won the battle but lost the war, he would never design/build anything of significance after the Chrysler Building.





William Van Alen was born in Williamsburg, Brooklyn in 1883 - the same year the Brooklyn Bridge opened. While attending Pratt by night, by day he worked for architect Clarence True. For three years, he studied at the Atelier Masqueray - the first architectural atelier (French for workshop) in America, founded by Franco-American architect Emmanuel Louis Masqueray. He worked for several architectural firms in NYC and in 1908, he won a fellowship in architecture to the prestigious Ecole des Beaux-Arts in Paris. In 1911, he returned to New York City and established an architectural practice in partnership with H. Craig Severance. Severance was well connected socially and a "businessman architect,' Van Alen provided the design talent. He married in 1916 and in 1925 dissolved his partnership with Severance. Sadly none of Van Alen's drawings, office records and/or personal materials are known to exist. Pratt Institute – his alma mater, established the Van Alen Institute in his honor to recognize and remember his talents and legacy. He died in 1954.



"...herd by themselves. They do not often go to parties, they do not go much to the theatre; they are always walking about the Metropolitan Museum or taking trips out to see old colonial houses or working on problems in the ateliers...There is something in the profession that gets the men it does as no other profession that I know of" RE: Observation of architectural apprentices of William Van Alen's generation

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"To my mind, Van Alen was the best of the modern architects of the period, and the Chrysler Building expresses New York of the time better than any other building" Chesley Bonestel, Architectural Renderer. Most famous for his "space art," Bonestel is credited with having designed the Chrysler

Building's exterior ornamentation including the radiator caps (31<sup>st</sup> floor corners) & eagle gargoyles (61<sup>st</sup> floor corners). Both radiator caps and eagle gargoyles (hood ornament) were based on a 1926 Chrysler.

















"I am not particularly interested in what my fellow men are doing. I wish to do things original and not be misled by a lot of things that are being done by someone else...that is my general policy." William Van Alen

RE: His reply to a question as to whether or not he read popular Architectural magazines













"In designing a skyscraper there is no precedent to follow for the reason that we are using a new structural material; steel, which has been developed in America and is different in every way from the masonry construction of the past...Structurally, and in their purpose, our tall buildings are wholly unlike any buildings of an earlier day. To apply to our tall office buildings, apartment houses and hotels the familiar architectural features characteristic of the comparatively low palaces, temples and churches that were built before the advent of steel as a building material is not economical or practical, and it is artistically wrong since it is not truthful." William Van Alen 211



"The tower should grow out the lower of masses surrounding it, and it should terminate in a crowning feature that is a natural and logical development of the tower itself, not merely an ornament placed on the top of the tower. All parts of the design should be tied together in a closely knit composition, each part not only belonging to the whole but accentuating the effectiveness of the other parts." 212

. William Van Alen

In Van Alen's original design for Reynold's tower, the top featured a glass dome and three-story high showroom windows at the building's base. Glasswrapped corners above gave the tower a "floatingon-air" visual effect. At 67-stories, the overall height was to be 807-feet. Due to cost concerns, Reynold's rejected Van Alen's original plan and would ultimately sell the lease and all of Van Alen's plans to Walter P. Chrysler in 1928.

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"...has departed from certain of the old-time principles on which the skyscraper was developed...the design of the Reynold's Building is developed to be of interest throughout its entire height" American Architect magazine, August 1928 RE: Van Alen's renderings for a 67-story high skyscraper at 42<sup>nd</sup> Street & Lexington Avenue for real estate speculator William H. Reynolds.





The Chrysler Building is based on an "H" floor plan , below the 31<sup>st</sup> floor, where the tower begins).

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There are setbacks at the 16th, 23rd and 30th floors. Office floors run through the 65th floor. Floors 66 thru 68 housed the

exclusive Cloud Club and the 71st floor was a public viewing gallery (closed in 1945). At nearly 1,047-feet (305m), it was the first man-made structure to exceed 1K-feet and retains the title of "World's Tallest Brick Building."









"Not rational, not profound, not subtle, not even, in the final analysis, very beautiful" Architectural Critic RE: Chrysler Building







"During the daytime the sun turns the tip of the building into a blazing beacon, and at night it is distinguishable by the hundreds of buildings surrounding it" Walter P. Chrysler

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Electrician Charles Londner and his crew installed two sets of lighting. The first are inverted "V" inserts (around the outline of the triangular windows of the terraced dome). Later floodlights were added to backlight the top of the building in various colors for special occasions. 224



"With all the surfaces of this spire turned toward the sky, it will reflect nothing but the sky, and because it will have no outline - all being in perfect reflection – it is expected to be almost invisible. Thus the tower will appear to join the sky and melt into any cloud that floats by." William Van Alen



"A milestone marking the beginning of modernism, with no attempt at novelty, no tendency to welcome the bizarre" Philip N. Youtz – Architect, 1931 RE: Overt praise for the new Empire State Building's design and covert contempt for the





Walter Chrysler was very fond of the idea that a Skyscraper was not just a building but, rather, a selfsufficient entity - a city unto itself. For Chrysler, the Skyscraper represented the communities of the future whereby technological advancement and shear scale would satisfy all communal needs. This "new city" concept captured the imagination of forward-thinking men and women. Proposals were made to create artificial sunlight via ultraviolet lamps (thus negating the need for windows). Another topic of discussion were modified pneumatic tubes to "shoot" people into skyscrapers (rather than using slower elevators). Climate Control was the only technology that would ultimately take root in the form of HVAC (Heating, Ventilation & Air Conditioning)

"Here is a city within a city – a community with its Schraft's restaurant and its Terminal barber shop, its stores, and beauty parlor, it's two gymnasiums and its two emergency hospitals for men and women...Every contribution to efficiency, sanitation, comfort and even inspiration, that human ingenuity can conceive or money can buy is provided" RE: Excerpt from a Chrysler Building brochure

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(Counter Service)





"Heavenward spring the spires of man's aspiration. Through the ages, from the eternal pyramids brooding over Egypt's timeless sands, the soul has sought expression in a restless, ceaseless striving to reach the heights ... And now, one more bold has attained a new eminence...into the glorious sky of eternal blue and billowy cloud springs the shining finial, fashioned of gleaming metal and flaunting its triumph like the upraised lance of a knight of old." RE: Excerpt from a Chrysler

Building brochure

In the summer of 2005, New York's *Skyscraper Museum* asked one-hundred prominent architects, engineers, builders, critics, historians and scholars to select their "top-ten" favorite New York City Skyscrapers from a field of twenty-five candidates. The *Chrysler Building* came in at first place with 90% of them listing the Art Deco masterpiece in their topten. *American Institute of Architects* (AIA) polls consistently rank Walter P. Chrysler's "nifty little tower" (as AI Smith – president of *Empire State, Inc.* disparagingly referred to it) as the best Skyscraper of all time.



Architectural critic Paul Goldberger has described the Chrysler Building's lobby as having a "cave-like" ambience, very true. It is triangular in form with entry from three sides (Lexington Avenue, 42<sup>nd</sup> and 43<sup>rd</sup> Street/s). The ceilings taper upwards from the entries and are covered with the world's largest canvas mural (it is glued to the ceiling) entitled: Energy, Result, Workmanship and Transportation, by artist Edward Trumbull. Some believe the mural is as confusing as its name. The mural prominently features the Chrysler building itself, decorative patterns, modern transportation (i.e. airplanes) and Chrysler factory workers. In effect, it is a testimonial in praise of modern technology. No expense was spared in decorating the lobby. Red Moroccan marbles walls contrast with sienna-colored floors and many art-deco flourishes including grills, elevator doors, signage, light sconces and the world's first digital clock: TIME. The lobby underwent a complete refurbishment in 1978. 236









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Once upon a time in New York City, the height above grade you ate your daily lunch was an indicator of your status in NYC society. From their lofty abodes high above the noise and traffic of the city (where lesser beings ate at ground-level restaurants or brown-bagged it), the tycoons of Wall Street and Captains of Industry ate the finest cuisine, drank martinis and retired to a smoking room afterwards to enjoy a fine cigar. Rockefeller Center had the Rockefeller Center Club (on the 65th floor of 30 Rockefeller Center). The Time-Life Building had on its 48th floor The Hemisphere Club and Tower Suite. The 45-story Socony-Mobil Building had the Pinnacle Club and on the 56th floor of the Pan Am Building was the Sky Club. However, the inspiration for all of them was Walter Chrysler's Cloud Club which occupied floors 66 thru 68 at the top of the *Chrysler Building*. An exclusive men's luncheon club, it opened in July of 1930 and had an exclusive membership of 300 movers and shakers including Conde Nast, Henry Luce, E.F. Hutton, J.D. Rockefeller etc.





The 66<sup>th</sup> floor featured a Tudor-style *Lounge* (with oak paneling) and a classic English-style *Grill Room* that featured wood beams, wrought-iron chandeliers, lead-glass doors and pegged oak-plank floors. Chrysler and Van Alen clashed over the design of the Cloud Club, the

former preferring a medieval/baronial style and the latter a modernist look and feel. A bronze and marble renaissance-style staircase linked the old with the new.



One flight up (on the 67<sup>th</sup> floor), was the futuristic *Main Dining Room.* It featured polished granite columns, etched glass sconces and a cloud mural on the vaulted ceiling. On the north wall (at left of photograph above), was a mural of Manhattan ca. 1929. Also on this floor, there were two private dining rooms; one for Mr. Chrysler (with an etched-glass frieze of Chrysler autoworkers) and one for Texaco (with a large mural of a Texaco refinery).







Saturn-like chandeliers suspended from a celestial-decorated ceiling Floors 67 & 68 also featured lockers for storing liquor during prohibition (which ended in 1933), a humidor, barber shop, kitchen and a stockticker room.

"I remember the wind whistling through very noisily, you could hear it inside"

RE: Henry Luce III, son of Henry Luce – founder of Time, Inc. recalling a visit to the Cloud Club when he was twelve years old. In a Cloud Club meeting in 1936, Henry Luce came up with the idea for Life magazine. The Club's clientele were, for the most part, executives in the oil, aviation, automobile and publishing industries. The fact that the club excluded women (for most of its existence), was relatively small and was not open at night took away some of the appeal of becoming a member. When newer and larger clubs opened atop buildings nearby, some members defected and, in general, membership began to decline in the 1950s and '60s. By the mid-1970s, the Chrysler Building was only a shadow of its former self. In 1977, the death-blow came to the Cloud Club when Texaco whose executives where the club's mainstay, moved to Westchester County. In 1979 the club closed its padded leather doors for good.



When *Tishman-Speyer* took over in 1998, the top two floors of the *Cloud Club* space was leased to tenants and the grand staircase linking floors 66 & 67 was removed. The top-most floors of the *Chrysler Building* are narrow, with low sloping ceilings housing mechanical and/or electrical equipment. Until they all moved to the *Empire State Building*, several radio/TV stations broadcast from the top floors. The 71<sup>st</sup> floor Public Viewing Gallery closed its doors in 1945.





The *Chrysler Building* is constructed of concrete, steel, brick, granite/stone, marble, glass and stainless steel. It contains more than 750-miles of electrical wiring (equal in length to the distance between NYC and Chicago), 20,961-tons of structural steel, 391,881 rivets, 2,826,000 bricks, 10K light bulbs and 3,862 windows. The official groundbreaking took place on September 19, 1928 and at its peak, one-thousand workers were involved with its construction. Construction was completed on May 28, 1930.



"Contrary to popular conception, the principal function of the General Contractor is not to erect steel, brick or concrete, but to provide a skillful, centralized management for coordinating the various trades, timing their installation and synchronizing their work according to a predetermined plan, a highly specialized function the success of which depends on the personal skill and direction of capable executives." 265



"You got to love it and can't quit it. Life down on the street's too slow. Who wants to be a pencil pusher after he's worked with steel." Ironworker



A riveter never worked alone. He was part of a gang of four; the heater or passer, the catcher, the bucker-up and the gunman. Riveters selected their own mates, and trained together, as closely as trapeze act. No "Boss" would try to inflict a new member on a team. If one member of a team didn't show up for work, the gang was laid-off for the day. John Tauranac, 267



"If the elevator shafts are less than straight, they will be more noisy than pistons in cylinders that are out of round. I want them perfect." Walter P. Chrysler

RE: Directive to the Chrysler Building's mechanical engineer. The Chrysler Building's elevators ran at 1,000fpm – 300fpm faster than the NYC Building Code allowed. The code was revised in anticipation of the completion of the *Chrysler* and *Empire State Building/s* which, due to their great height, required faster elevator service.



"Ye gods! If there ever was an experience to bring to the human body its sense of helplessness and despair, its agonies and terrors, it is the sensation felt by one who has not had training when he suddenly finds himself out on a narrow beam or plank, high above the ground and unprotected by a hand-hold of any kind." Colonel William Starrett, 1928















"In this battle of the skyscrapers...l was brought in as a sort of war correspondent on the Chrysler side. The scene of battle was that relatively narrow band of atmosphere ranging from 800 to 1,200 feet above the sidewalks of NY...The principal target was prestige. A skyscraper was a tall and strong feather in the cap of that ultra-rare individual who could afford to build one...Chrysler was aware of the stupendous advertising value generated when the world's highest building bears the name of your product. This was where I came in." Margaret Bourke-White, 276 Photographer





"With three men holding the tripod so the camera wouldn't fly into the street and endanger pedestrians...my camera cloth whipping and stinging my eyes as I focused...I tried to get the feel of the tower's sway in my body so I could make exposures during that fleeting instant when the tower was at the quietest part of its sway" Margaret Bourke-White, Photographer































