

**The Dramatic Dawn of**

# **CHICAGO NIGHT FLIGHTS**

**By Charles Ebeling**

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Like curious moths, we are magnetically attracted to light. Looking out to the East from the panoramic windows of our usual gathering place on the 22<sup>nd</sup> floor of the Cliff Dwellers Club, across Michigan Avenue from the Art Institute, overlooking Grant Park and Chicago's lakefront, you can often see the lights of approaching planes heading towards us to land at O'Hare and Midway. On a clear night you may make out distant shore lights twinkling along the lake's curve across northern Indiana and even into Michigan.

Consider then the following excerpt from a poem about a single far off light, in fact a two billion candlepower beacon, pulsing from atop Chicago's famed Palmolive Building, and clearly seen from a sandy beach across the lake.

This is from "Reflections, 1951" by architect Gregory Jenkins:

My first recollection of Chicago is at dusk  
From the Southern Tip of Lake Michigan  
There had been a sunset. Then fireflies  
And a bonfire that lofted sparks and embers skyward  
To stars that fell on a jeweled horizon.

More.

There was a beacon

Brighter than the stars

At the far water's edge,

That shone first east, and then spun south,

Reflecting on the ripples at my feet.

It disappeared in the western sky

And returned. Around.

Again and again.

I didn't hear

The folding of blankets

Or the rattle of dishes

Or the wooden click on the picnic basket.

Or the parade of grandparents, aunts, and cousins,

Shuffling in the sand

Back to the cars,

Or the call "it's time to go."

I do remember

That my father swept me up

From the water's edge,

Sat me on his shoulder,

And as I began to struggle he said

“That is Chicago. And That is the Lindbergh Beacon.”

Few possess more than a vague recollection of the web of history that surrounds this particular shaft of light in the night.

For example, some years later, the beacon in question was informally nicknamed the “Bunny Beacon” by local revelers. In the years between 1967 and 1989, the handsome 37-story structure beneath it at 919 North Michigan Avenue was re-named the Playboy Building -- headquarters of the most ubiquitous gentleman’s club and men’s magazine of the era. Publisher Hugh Hefner thought the beacon reminded him of the “Gatsby-esque glamor” of another era. The illuminated letters, P-L-A-Y-B-O-Y, were nine feet tall, and set just below the bright beacon’s lofty spire.

But the original name of the famous swiveling searchlight atop the stately Palmolive Building, located near the northern terminus of Chicago’s Magnificent Mile, was the Lindbergh Beacon, as it is again known today. The beacon dated to an era in the late 20s when America was still in a tizzy about Lucky Charles Lindbergh’s first-ever non-stop flight over the Atlantic. It was the thrilling, pioneering era of coast-to-coast airmail and the dawn of regular domestic commercial flight.

It must have been a mesmerizing sight to see such an incredibly powerful beacon light swinging across the horizon from atop a skyscraper. Such a light would not only bring in planes, but might also attract tourists and bring in their business, enhancing the building's stature and that of the Magnificent Mile, much as another such beacon had shown above The Great White Way, the curving ribbon of white light leading to Times Square in New York City.

Chicago's Lindbergh Beacon, that historic city lighthouse in the sky, came back into my own sight, at least euphemistically, while I was waiting for my doctor in his examination room in the Streeterville neighborhood. To kill a few minutes, I looked more closely at a framed poster on the wall. It showed a stylized map, portraying the Chicago waterfront as it would appear for the 1933 World's Fair, and I noted a small excursion boat portrayed offshore from Oak Street beach. The occupants were illuminated by a carbon-arc searchlight reaching out over the lake from atop the towering Palmolive Building, with the caption "two billion candlepower."

The seemingly incredible claim of that cartoonish caption caught my attention, and I resolved to research it when I got home, to see if that stalwart beacon I recalled from my youth could really have been so incredibly powerful. It turned out it was, and I began to learn a lot

more. I didn't then realize I'd plumb more than 100 resources – from field trips to interviews, from books to scores of online articles and photo archives – to piece together the illuminating story around this singularly bright beam.

For example,

\* Construction of the 37-story building by Holabird & Root began in 1927 and was completed in April 1929 as the headquarters for the world's leading soap manufacturer, The Colgate-Palmolive-Peet Company. The office building was at first positioned by its owner as "a monument to cleanliness." The company moved its headquarters to New York in 1934, but the building retained its Palmolive Building moniker.

\*It was Chicago's first commercial skyscraper to be built so far from the Loop – capping the northern end of Michigan Avenue. It has been described as an Art Moderne, jazz age triumph. The 6 million dollar, flat blade of a building presents its narrow side to the winds of Lake Michigan, rising into the air with a dignity, power and presence that some say inspired the design of the Empire State Building in New York. According to one observer, "Its setbacks have setbacks, and the whole thing looks vaguely reminiscent of those shiny stylized steam engines that only seem to exist in French poster art of a certain era. "

\* The building's 603 foot height included a 112-foot steel tower, clad in gleaming aluminum, originally topped by the 12-foot high Lindbergh Beacon. The U.S. Lighthouse Service, in the days before radar and modern means of communication, operated an Aviation Division, which built towers that helped guide the early airmail plane pilots across the country, and also maintained the lights on the early and primitive landing strips that we now call airports. In 1926, airmail rights were transferred from the Post Office Department to the U.S. Department of Commerce, and commercial airmail began.

\*At the Millennium, the Art Deco building was designated a Chicago landmark. In 2002, the Palmolive Building was converted to luxury condominiums, with upscale shops and offices on the first two floors, by developer Draper and Kramer, at a cost of \$135 million. And in 2003, the building was added to the National Register of Historic Places.

But to me, the most fascinating aspects of the history of today's Palmolive Building are the stories that surround its magnificent Lindbergh Beacon, in many ways the grand finale of the early system of nighttime aircraft navigation.

America's fascination with air travel had come into full bloom with Charles Lindbergh's monumental first nonstop, inter-continental flight from America to Paris in 1927.



“Slim,” or Lindy, as he came to be known, had dropped out of the engineering school at the University of Wisconsin, and applied for flight training in Nebraska in 1922. The next two summers the shy, tall and skinny young man became a barnstormer, doing wing walking and sky diving. Surviving that, he picked up the nickname “Lucky Lindy.” Next, he enlisted in the Army as a flying cadet, and won the highest rating among his graduating class, but could not find a regular posting in the slimmed-down post war military.

Back in civilian life, he became one of the earliest airmail pilots, on a pioneering route between Chicago and St. Louis, with stops at Springfield and Peoria. Lindy and his fellow airmail pilots on the route would make overnight landings in farmer’s fields, roping their light planes to fences so they wouldn’t blow away. On at least one occasion Lindy had to bail out, as his stalled plane dived into the ground. A portion of the propeller from that downed plane has been found near the crash site in Ottawa and the local historical society has put up a black granite marker at the site. Despite such setbacks, Lindbergh achieved ninety-nine percent airmail delivery efficiency, even without proper equipment and landing facilities.

A few years ago, a 93-year-old farmer in Godfrey, Illinois, remembering as a boy seeing Lindy land nearby, found not only an early cement

navigational arrow pointing toward Springfield but the base of a 60-foot early 1250 candle power beacon, one of 1,500 such aircraft beacons established between 1923 and 1933, that guided pilots from city to city across the airmail routes. This sequential lighted airway had made high speed transcontinental airmail possible. Each tower had numbers painted on it for daytime identification, and at night the beacons flashed in sequences the pilots could match to printed guides they carried. As well as the rotating beacon, one fixed tower light pointed to the next field and one to the previous tower, forming an aerial roadway. The field at Godfrey was one of nine emergency landing sites along Lindbergh's postal route.

It was during his brief tenure as an airmail pilot that Lindbergh heard of the Orteig Prize, with a \$25,000 cash purse (the equivalent of a third million dollars today) which had been created in 1919 by a New York hotel owner, Raymond Orteig, who emigrated to the city from France in 1912. He eventually acquired two hotels, which were popular with French airmen assigned to duty in the U.S. during the Great War. The award would go to the first non-stop flyer between New York and Paris.

It wasn't until the mid-20's that technology had advanced enough to make such a flight possible. Many teams were preparing for the challenge. Then, in early May of 1927 Charles Lindbergh, that young

unknown airmail pilot, obtained \$10,000 in funding for his new Ryan monoplane. He repositioned The Spirit of St. Louis to Curtiss Field in New York, setting a new North American transcontinental speed record in the process. Lindbergh completed test flights there, racking up less than 28 hours of flight time on the plane – but less than the predicted duration of the non-stop Atlantic crossing.

On May 26<sup>th</sup> he took off, with a full tank of fuel, but no parachute, radio or sextant, to save weight. He turned down a \$1000 offer to carry a small package of mail, again because of the weight. Unlike most of the other flyers who would attempt the flight, six of whom lost their lives in the effort, he piloted the single engine plane alone.

Thirty three and one half hours later, the 25-year old Lindbergh landed at Le Bourget Airport, in Paris, winning the coveted prize. His new transatlantic milestone was followed by the “Lindbergh Boom,” as public enthusiasm for air travel soared. Lindbergh’s Orteig Prize inspired, in our time, the \$10 million Ansari X Prize for repeated suborbital spaceflights.

As author Bill Bryson describes the “Lindbergh Boom” in his wonderful time capsule of a book, “ONE SUMMER, AMERICA, 1927,” “Parks were named after him, children were named after him, streets and mountains, hospital wards, zoos and animals, rivers, high schools and

bridges – all were named after him...In Minnesota, a proposal was made to rename the state Lindberghia.”

After Lindbergh’s historic flight, he was offered the post of Technical Advisor to the President of Pan American, in order to pioneer routes around the Caribbean. In 1929, he joined the Transcontinental Air Transport Company and established a coast to coast air and rail line known as “The Lindbergh Line.”

But, we’ll pick up the story just three months after Lindy’s transatlantic flight from New York to Paris. Lindbergh had set off on a triumphant 82-city victory tour of the U.S., flying his now famous plane, the Spirit of St. Louis. He retraced his old airmail route, departing from St Louis as part of the tour. One farm family, where Lindbergh and his fellow pilots had sometimes made emergency landings, received word that he would fly over enroute to Chicago. They recalled him appearing over their threshers in his silver-gray aircraft, “He swooped down over us as everyone was waving enthusiastically. My mother said she could see Lindbergh very plainly – dipping his wings and a salute – and then on he went.”

On August 12, 1927, the Chicago Tribune of that date reports: “From 1:45 pm until 3 while Lindy swung the big-winged monoplane three times around the Loop and as far north as Chicago Avenue, the din in

this city was for the man and his plane, but then until 10 in the evening, thousands cheered at the sight of the man.

“It is estimated that 250,000 persons grouped at three principal points and packed along a twelve mile route from the Municipal Flying Field (now Midway Airport), out to Cicero Avenue and 53<sup>rd</sup> street to Soldiers’ Field, and saw Lindbergh himself.

“The long day for Lindbergh came to a dramatic end with a formal banquet at the new Stevens Hotel (now the Chicago Hilton and Towers). The Stevens was then the largest hotel in the world, and coincidentally had opened only two weeks before Lindy’s historic flight. Lindbergh was toasted in the splendid Grand Ballroom by Chicago’s mayor, William Hale (Big Bill) Thompson and an impressive lineup of federal, state and local officials. It was rumored that Democratic alderman Albert J. Horan had paid off the Republican mayor for the privilege of presenting Colonel Lindberg with his gift from the city, a book setting forth the plans for a huge Lindbergh beacon light to guide in aircraft to the city at night. The eight-course Lindbergh dinner in the ballroom, a replica of the ballroom at Versailles, concluded with cigars, cigarettes and ‘glace fantasie a la Lindbergh’.”

The namesake “glace” that night would have quickly melted in the glare of the massive electric carbon arc searchlight that would be mounted

atop the Palmolive Building in 1930, the same year that the first American radio-equipped airport control tower was built. The idea for naming the great light the Lindbergh Beacon was credited to Early N. Hurley, who was also a key figure in the 1933 Chicago World's Fair.

According to Lynn Stephens, current building property manager for Draper and Kramer, the night the beacon was to be first ignited, the media shy Lindbergh, staying next door at the Drake Hotel, when he heard there would be reporters and news cameramen at the lighting ceremony, sent his regrets. The dedication was conducted following a dinner atop the building, hosted by Merrill C. Meigs, chairman of the civic committee for the event. Meigs, publisher of the Chicago Herald and Examiner, had been inspired to become a pilot by Lindbergh's solo flight, and had immediately started to promote Chicago as the world center of aviation. It was Meigs who later taught Harry Truman to fly.

But while the Beacon was forever best known as the Lindbergh Beacon, it was technically renamed the Palmolive Beacon less than one year later, after Lindbergh renounced the dedication because he was too afraid of the media attention surrounding him and his wife Anne's presence for the 1930 National Air Races. Moved to Chicago that year, and including such other aviation greats as Wiley Post and Jimmie



Doolittle, the races were held at Curtiss-Reynolds Field, later the site of Glenview Naval Air Station.

The beacon had been donated to the city by celebrated inventor Elmer A. Sperry, founder of the Sperry Rand Corporation, who had created the high-intensity electric arc lamp as well as the gyroscopic compass and automatic pilot, so essential to successful air navigation. It was one of two aircraft beacons named after the famous flyer. The other was installed atop the Los Angeles City Hall in 1928, removed in the 1940's and has recently been restored and is relighted for special occasions. Chicago's beacon was so innovative and momentous that at its dedication in 1930, President Herbert Hoover, from the White House, pressed a telegraph key to inaugurate operation of the rotating light.

The original beacon itself, with its 80-inch lens, consisted of two electric mirrors and thirty-six inch diameter parabolic reflectors, which generated two brilliant beams, one with 2 billion candlepower and the other with 1.1 billion. Candlepower is a measure of how much light a lamp gives out, usually in a focused beam, as in a flashlight, unlike the measure of wattage most often used today, which measures how much power a lamp consumes. Thus, there is only the most indirect relationship between candlepower and watts.

The lesser searchlight beam on the Lindbergh Beacon continuously pointed the way to the city's municipal airport, while the stronger beam and its 1945 replacement revolved 360 degrees, at two revolutions per minute, and could beam in planes from upwards of 100 miles on a clear night.

According to Modern Mechanics Magazine of July 1930, the light was "mounted with a two degree pitch above the horizon, to avoid blinding people on the ground. At 300 miles out, or approximately the distance of Cleveland, the light will be 39,000 feet above the earth, owing to its pitch and the curvature of the earth. Further on, its light will be lost in space, and no one will ever see it, at its extreme range of 500 miles. Aviators flying in the neighborhood of Milwaukee or St. Joseph, Michigan, will be able to read newspapers by the light," said the magazine. In 1937, a reporter for the Chicago Herald Examiner said he could read a paper by the light in a plane 27 miles north of the city. In another test, an aviator was able to read the New York Times 50 miles away from the light.

How did this new super carbon arc light work? In experimenting, inventor Elmer Sperry had to find an electrical conductor with a higher melting point than carbon, and carbide in a molten form was the answer. Carbon melts at 2800 degrees and carbide at 5000. Sperry

devised a way of using the two elements: a carbon electrode was brought into contact with a pool of molten carbide; and the result was an arc light of extremely high intensity.

One fellow remembered how he tended the beacon while he worked for Playboy in 1976. "I operated the beacon while the Hancock Building was under construction," he recalls. "As a 19 year old engineering student at IIT, it was quite a thrill to crank up the motor-generator in the equipment room at the base of the tower and then ride the tiny one-man elevator up to a ladder that led to a catwalk surrounding the beacon. The carbon rods that sustained the bright arc burned down in a while and I had to climb inside the beacon every two hours to replace them. It was scary as hell alone up there on rainy nights -- great memories of the Chicago skyline from the top of the world!"

One Chicago architecture website contains several thoughts and recollections from observers of the Lindbergh Beacon. One recalls, "From 1950 to 1970, my family and I lived 15 miles southwest of downtown. Many nights, when weather permitted, my dad and I would sit outside and watch the Lindbergh Beacon. Brings back good memories for me."

Another writes: "I remember it from the late 40s, when my mother would bring me here on the overnight train from upstate New York. It

would be night when the train came around the bottom of the lake and I was always still awake in the Pullman bunk. The beacon would twinkle across the lake and that was my first excited sign that we were here and I could soon have a streetcar ride from their apartment to the Museum of Science and Industry. I miss the beacon.”

A third writes: “I have a very clear memory from 1942 of the original Lindbergh Beacon. I was six and World War Two had begun. My father was in England in the Army Air Corps and my family lived on one of the “tree” streets. My sister and I used to watch the beacon from our beds when we were going to sleep. It was so reassuring in the dark and quiet night sky, comforting to go to sleep watching it turn. It was turned off while we were there because of the potential threats of air raids. We really missed it.”

My own wife, Victoria, remembers the iconic pulsing light above the city, as seen from her family’s apartment across from Belmont Harbor to the north.

Once called “Pine” street, Michigan Avenue and its surrounding district, with 56 hotels, 275 restaurants, nearly 500 retail locations and other institutions is today a forest of tall buildings that has somewhat obscured the Palmolive Building.

The distinguished Lindbergh Beacon perhaps sparked a new neighborhood tradition, the annual Magnificent Mile Lights Festival, with its glamorous million twinkling lights. That tradition was kicked off by none other than actress Carmen Miranda, who threw the switch to ceremoniously bring new light to Michigan Avenue in November, 1951, illuminating the 67-foot-tall holiday tree in Water Tower Park.

I have to briefly divert to tell another story about lighting up Chicago that celebrated the advance of science. In 1933, just three years after the great beacon was first lighted, another grand illumination event heralded the opening of Chicago's Century of Progress World's Fair, held on Northerly Island, which later became the home of Meigs Field, Chicago's former lakeshore airport.

Charles Frost, the renowned astronomer who had headed Yerkes Observatory, home of the world's largest refracting telescope, at Lake Geneva, came up with a brilliant idea. The observatory would capture the light that had first emanated from Arcturus, the giant orange star, at the time when the 1893 Chicago World's Fair was held. That ray of light, which had taken 40 light years to reach earth, would be used to trigger the illumination of the 1933 fair. Using new photocell technology, Arcturus's light was captured at Yerkes and three other observatories and transmitted to Northerly Island, where it was

converted to electricity to power the switch which first lighted the World's Fair grounds. Once again, Chicago was celebrating the progress of science with light.

And what became of the Lindbergh Beacon? Ron Twellman, Curator of Collections at the Experimental Aircraft Association's museum at Oshkosh, Wisconsin, says that today it is mounted on a ground platform between two aircraft hangers at Pioneer Airport, behind the museum. But he doubts that it is the original \$100,000 1930 Lindbergh Beacon, but probably the 1945 post-war replacement.

When the giant Hancock Building was constructed in the 60s, they designed the mechanical floor to match the height of the beacon's beam, so it would not shine into any of the residential or office windows. The solution didn't work. The beacon was further refined in 1968, adding a shield to focus its beam and prevent peripheral scattering of light at its base. I remember cruising far offshore aboard my father's boat in the late 60s, and using the beacon as a guide to determine our relative position.

But neighbor complaints continued. And environmentalists expressed fears that the beacon would create more light pollution, waste energy and interfere with migrating birds. The head of the Chicago chapter of the International Dark-Sky Association observed, at the time, "It's a



waste of electricity and a brightening of the skies that's not needed, I know there's a big effort in Chicago to have lighting for the aesthetics of the city," but he characterized the beacon a "frivolous ornament."

The Beacon above the Palmolive Building was shut down during the energy crisis of 1973, and removed in 1988, darkened when it became too much for people living in later-arriving high rises. It had not been illuminated since 1983, becoming obsolete for airplane use long before, since the development of radio navigational equipment and radar. In 1990 the beacon was replaced with a globe with a soft glow, lit by fluorescent tubes.

In 2001 and 2002, Draper and Kramer acquired a World War II surplus beacon and retrofitted it for modern use. It included modern optics and light control mechanisms that allowed it to rotate in a 120 degree arc, over Lake Michigan, intended to cast no discernible light spillage or disturbance to its neighbors.

However initial tests were not very successful. It was creating a full-moon effect, illuminating the exterior of nearby buildings. Each time it was turned on, neighbors complained and their concerns eventually won the sympathy of their alderman, Burton Natarus. He said, "When people look out the window, they won't see the moon. They won't see

the stars.” One law student, studying late at night, was so upset by the glare that he even called 911 and asked the police to look into it.

In more recent years it was only turned on for special occasions, such as Independence Day of 2007. When President Obama was elected, one pol suggested that the beacon be lighted and renamed the Obama Beacon, sending the message, “Welcome home, Sir. We’ll leave on the light for you.”

Today, the current energy-efficient single carbon arc beacon, which cost more than a half million dollars, reportedly uses less energy than 10 hair dryers. Yet it still projects a bright beam, focused out over the lake in a non-intrusive, 60 degree arc. It is lighted, via a computer, every Friday and Saturday night, and on holidays and special occasions. A proud maintenance man I met in my first visit inside the building since 1969, in the Playboy days, still regularly climbs the tower to keep it working well. With building manager Stephens I visited the Beacon Club lounge, where residents gather for special occasions, and toured the reception area outside, where they enjoy a gallery of beautiful Hedrich and Blessing black and white photos of the beacon, and framed documents of its history.

The venerable beacon itself no longer serves the once noble purpose of guiding aircraft into a new age. Nor is it the most powerful such beam

on earth. That distinction goes to a shaft of light beamed straight up from the top of the pyramid-shaped Luxor Hotel in Las Vegas, which is clearly visible from space.

But today, the modern Lindbergh Beacon lives endures, shining its warm welcome out over Lake Michigan from high above the resplendently restored Palmolive Building, rekindling in us nostalgic memories of the dramatic dawn of Chicago night flights.

Postscript: The original title for this essay was to be, simply, NIGHT FLIGHT. Shortly before presenting this piece to the Chicago Literary Club, I learned that I would have shared that title with an important 1931 novel by French writer and aviator Count Antoine de Saint Exupery. His book told the spell-binding fictional story of an early Argentinian airmail pilot. That tale was adapted into a classic 1933 MGM film by the same name, starring Clark Gable, Helen Hayes, John and Lionel Barrymore, Myrna Loy and Robert Montgomery. While there is scant common ground between Saint Exupery's novel, the epic MGM film based upon the novel, and my true story set in that era, I nonetheless decided to re-title my essay CHICAGO NIGHT FLIGHTS.

Charles Ebeling is a life-long Chicagoan and retired public relations executive, who remembers the Lindbergh Beacon from his youthful visits into the city, and from when the Palmolive Building was the headquarters of Playboy. He still often views its beam on walks and drives from his home on the city's near north side. A decade ago, reading of the Orteig Prize, which had stimulated so much advancement in air travel, Ebeling created a prize program in his own field of building public relationships, the Ebeling PR-ize, for excellence in cause-related communications, which is awarded to student teams at Bradley University and Loyola University Chicago. Chicago Night Flights is Ebeling's tenth essay for the Chicago Literary Club. For find his other essays for the club, see [www.chilit.org](http://www.chilit.org) and click on "Roll of Members."