

United States Department of the Interior
National Park Service

SENT TO DC
6-30-94

National Register of Historic Places Registration Form

This form is for use in nominating or requesting determinations for individual properties and districts. See instructions in *How to Complete the National Register of Historic Places Registration Form* (National Register Bulletin 16A). Complete each item by marking "x" in the appropriate box or by entering the information requested. If an item does not apply to the property being documented, enter "N/A" for "not applicable." For functions, architectural classification, materials, and areas of significance, enter only categories and subcategories from the instructions. Place additional entries and narrative items on continuation sheets (NPS Form 10-900a). Use a typewriter, word processor, or computer, to complete all items.

1. Name of Property

historic name Elgin National Watch Company Observatory

other names/site number School District U-46 Planetarium/Observatory

2. Location

street & number 312 Watch Street not for publication

city or town Elgin vicinity

state Illinois code IL county Kane code 089 zip code 60120

3. State/Federal Agency Certification

As the designated authority under the National Historic Preservation Act, as amended, I hereby certify that this nomination request for determination of eligibility meets the documentation standards for registering properties in the National Register of Historic Places and meets the procedural and professional requirements set forth in 36 CFR Part 60. In my opinion, the property meets does not meet the National Register criteria. I recommend that this property be considered significant nationally statewide locally. (See continuation sheet for additional comments.)

William L. Wheel SH, PO 6-29-94
Signature of certifying official/Title Date

Illinois Historic Preservation Agency
State of Federal agency and bureau

In my opinion, the property meets does not meet the National Register criteria. (See continuation sheet for additional comments.)

Signature of certifying official/Title Date

State or Federal agency and bureau

4. National Park Service Certification

I hereby certify that the property is:

- entered in the National Register. See continuation sheet.
- determined eligible for the National Register See continuation sheet.
- determined not eligible for the National Register.
- removed from the National Register.
- other, (explain:)

Signature of the Keeper

Date of Action

5. Classification

Ownership of Property
(Check as many boxes as apply)

- private
- public-local
- public-State
- public-Federal

Category of Property
(Check only one box)

- building(s)
- district
- site
- structure
- object

Number of Resources within Property
(Do not include previously listed resources in the count.)

Contributing	Noncontributing	
1	0	buildings
0	0	sites
0	0	structures
1	0	objects
2	0	Total

Name of related multiple property listing
(Enter "N/A" if property is not part of a multiple property listing.)

N/A

Number of contributing resources previously listed
in the National Register

N/A

6. Function or Use

Historic Functions
(Enter categories from instructions)

Education/Research Facility

Current Functions
(Enter categories from instructions)

Education/Research Facility

7. Description

Architectural Classification
(Enter categories from instructions)

Classical Revival

Materials
(Enter categories from instructions)

foundation Concrete

walls Concrete

roof Tin

other Asphalt

Narrative Description

(Describe the historic and current condition of the property on one or more continuation sheets.)

8. Statement of Significance

Applicable National Register Criteria

(Mark "x" in one or more boxes for the criteria qualifying the property for National Register listing.)

- A** Property is associated with events that have made a significant contribution to the broad patterns of our history.
- B** Property is associated with the lives of persons significant in our past.
- C** Property embodies the distinctive characteristics of a type, period, or method of construction or represents the work of a master, or possesses high artistic values, or represents a significant and distinguishable entity whose components lack individual distinction.
- D** Property has yielded, or is likely to yield, information important in prehistory or history.

Criteria Considerations

(Mark "x" in all the boxes that apply.)

Property is:

- A** owned by a religious institution or used for religious purposes.
- B** removed from its original location.
- C** a birthplace or grave.
- D** a cemetery.
- E** a reconstructed building, object, or structure.
- F** a commemorative property.
- G** less than 50 years of age or achieved significance within the past 50 years.

Areas of Significance

(Enter categories from instructions)

Commerce

Science

Period of Significance

1910-1944

Significant Dates

1910

Significant Person

(Complete if Criterion B is marked above)

N/A

Cultural Affiliation

N/A

Architect/Builder

Hunter, George, Architect

Narrative Statement of Significance

(Explain the significance of the property on one or more continuation sheets.)

9. Major Bibliographical References

Bibliography

(Cite the books, articles, and other sources used in preparing this form on one or more continuation sheets.)

Previous documentation on file (NPS):

- preliminary determination of individual listing (36 CFR 67) has been requested
- previously listed in the National Register
- previously determined eligible by the National Register
- designated a National Historic Landmark
- recorded by Historic American Buildings Survey # _____
- recorded by Historic American Engineering Record # _____

Primary location of additional data:

- State Historic Preservation Office
- Other State agency
- Federal agency
- Local government
- University
- Other

Name of repository:

10. Geographical Data

Acreage of Property Less than one

UTM References

(Place additional UTM references on a continuation sheet.)

1	16	394590	4653690
	Zone	Easting	Northing
2			

3			
	Zone	Easting	Northing
4			

See continuation sheet

Verbal Boundary Description

(Describe the boundaries of the property on a continuation sheet.)

Boundary Justification

(Explain why the boundaries were selected on a continuation sheet.)

11. Form Prepared By

name/title Gary L. Kutina/Astronomer

organization School District U-46 date April 29, 1994

street & number 355 East Chicago Street telephone 708-888-5324

city or town Elgin state Illinois zip code 60120

Additional Documentation

Submit the following items with the completed form:

Continuation Sheets

Maps

A USGS map (7.5 or 15 minute series) indicating the property's location.

A Sketch map for historic districts and properties having large acreage or numerous resources.

Photographs

Representative black and white photographs of the property.

Additional items

(Check with the SHPO or FPO for any additional items)

Property Owner

(Complete this item at the request of SHPO or FPO.)

name School District U-46

street & number 355 East Chicago Street telephone 708-888-5000

city or town Elgin state Illinois zip code 60120

Paperwork Reduction Act Statement: This information is being collected for applications to the National Register of Historic Places to nominate properties for listing or determine eligibility for listing, to list properties, and to amend existing listings. Response to this request is required to obtain a benefit in accordance with the National Historic Preservation Act, as amended (16 U.S.C. 470 et seq.).

Estimated Burden Statement: Public reporting burden for this form is estimated to average 18.1 hours per response including time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding this burden estimate or any aspect of this form to the Chief, Administrative Services Division, National Park Service, P.O. Box 37127, Washington, DC 20013-7127; and the Office of Management and Budget, Paperwork Reductions Projects (1024-0018), Washington, DC 20503.

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Elgin National Watch Company Observatory

The Elgin National Watch Company Observatory is located on the east bank of the Fox River Valley at the northeast corner of Watch and Raymond Streets in Elgin, Illinois. It stands at its original location, on a sloped site, two blocks east from where the Elgin National Watch Company Factory once stood.

The site was chosen to be as close to the Elgin National Watch Company Factory as possible and on ground high enough to give an unobstructed view for celestial observations. Another critical criteria for the location was the observatory's necessary gravel base. Sixty feet below the surface, the gravel base helps to absorb any surface or subsequent vibrations. Concrete piers used to secure the telescope as well as the four Riefler clocks were extended down into the gravel layer to minimize any vibration.

The Observatory, built in 1910, is a two-story building comprised of three segments: the observatory, the central entrance and the office segment. (See first and second floor plan sketches.) The first segment is a two-story, domed octagonal observatory to the east side. It is of poured concrete construction. The first floor opens off the entry hall with a steel door and contains a stairway to the second floor, small lavatory with toilet and basin, and an "air lock" type entry to the temperature controlled clock vault. The clock vault contains two Riefler master clocks mounted on a poured concrete pier, which is isolated from the building proper and extends sixty feet into the gravel till.

The room above the clock vault houses the celestial transit instrument, manufactured by Warner and Swasey of Cleveland, Ohio. The transit is mounted on another isolated, poured concrete pier which extends sixty feet into the gravel till. The observatory is topped with a poured concrete dome, covered with sheet metal and nearly hemispheric in form. Each facet of the observatory's octagon measures eighteen feet across; seven of eight facets contain four-foot tall one-over-one windows with oak trim that tilt outward. The eighth facet contains a steel door entry into the second floor chronograph room.

The dome has an observation opening three feet wide and traversing 180° on the polar axis, to allow observations of the transit, which is fixed in its north-south axis. An oak cabinet which slides on rails covers the transit instrument when not in use. The dome opening is covered with a pair of steel shutters, each weighing about a half-ton, which are opened by an ingenious system of chains,

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sprockets, gears and worm gear shafts operated by a crank. This system was designed and built by the Elgin National Watch Company Machine Department.

The second segment of the building is a two-story central entrance block. On the ground floor the eight-foot wide entryway connects the office area to the observatory and provides entry to the planetarium. The walls are of lathe and plaster; the oak wood trim is in its original state. This room contains a lavatory with toilet and wash basin.

The second floor room above the entranceway is known as the "Chronograph Room" and contains only one of two original Riefler clocks timed to the master clocks on the first floor. The two original "slave" clocks were mounted on the west side of the room on an isolated concrete pier which extended sixty feet into the gravel till. Located on the north side of the room is a switchboard, used to direct time signals from the master clocks to the Watch Factory as well as to the company's office in Chicago. A double-hung window is in the south wall. Located on the south side of the room was the chronograph, manufactured in 1909 by Warner and Swasey of Cleveland, Ohio. This instrument was used to record star observations and match the impulses of the master clocks with them. In addition, fine clocks could be tested for accuracy by using the chronograph.

The third segment of the building is a two-story office segment to the west. The ground floor office is a 15'x15' room with two double-hung windows in each of the south and west walls. A combination of open shelves and cabinets with glass inset doors covers the north wall from floor to ceiling. All are of oak and in their original state. The office walls are of lathe and plaster and the oak wood trim is still in its original state. The floor is hardwood covered with carpeting.

Above the office and on the second floor is located the astronomer's "sleeping room," which simply consisted of a basin and cot. A pair of double-hung windows are found on both the south and west sides of the room; a similar window is located on the north side of the room. In 1926, with the addition of radio equipment, the sleeping room was converted to a radio room from where short-wave time signals were broadcast. An original transmitter still occupies its position in the room.

At the northeast corner of the room a door leads to a staircase and hatch to the flat roof of the office section. A fully equipped weather reporting station was located on the roof. Today a fifteen-foot mast with decorative weathervane remains on the roof. The tin roof is covered with aluminum paint. A decorative metal rail surrounds the perimeter of the office segment roof.

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One hundred and twenty feet directly north of the Observatory and on a concrete pier that extends sixty feet into the till was a small wooden shed known as the "Mark House." This contained an optical system transmitting a point of light, or "artificial star," used to orient the Observatory's transit instrument on its axis. Razed in 1966, the shed's foundation and concrete pier remains in good condition. This is considered to be a contributing object within the property.

In 1960 the Observatory and grounds were deeded to School District U-46. A planetarium was added to the rear of the building in 1963. This addition is not visible from the streetscape and so does not detract from the building's silhouette in any way. This 39' x 27' frame structure with wood and synthetic siding and a full basement has a high mansard roof to accommodate the projection dome's 24' diameter. The dome is of perforated aluminum required by the Spitz A-3-P Star Projector. Concentric seating accommodates 65 people. There is an exit door at the northwest side basement level and northwest side of the first floor.

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The Elgin National Watch Company Observatory meets Criterion A for listing in the National Register of Historic Places. The Elgin National Watch Company Observatory is locally significant for commerce for its use by the Elgin National Watch Company as a symbol of quality and precision through the company's advertising. It is the only known time observatory built for a private manufacturer. As the last vestige of the Elgin National Watch Company, it is the functional, physical remnant of the industry synonymous with the City of Elgin. The Elgin National Watch Company Observatory is also locally significant in the area of science for its endeavor to achieve precise time from the stars and for its role as a United States Weather Station. The period of significance is 1910, the year the Observatory was built, to 1944, the fifty-year cutoff for the National Register.

The first settlers to Elgin were Hezekiah and James T. Gifford. Hezekiah Gifford of Oneida County, New York, lured by the rich soil in Illinois, visited the Fox River valley in the spring of 1834. Impressed with the potential of the country, he returned to New York, and convinced his older brother, James T. Gifford and their respective families to move to the area the next spring. In April of 1835, the Gifford brothers reached the Elgin area and staked claims on the east side of the Fox River. Before leaving New York, James Gifford had selected the name for the new town which would be called Elgin.¹

On July 19, 1837 a post office was established at James Gifford's home and he was commissioned as postmaster. James Gifford laid out a 21 block plat on the east side of the river on August 3, 1842 and in 1854 the city of Elgin was incorporated. In 1850, the Galena and Chicago Union Railroad reached Elgin.²

During the early summer of 1864, two employees of the American Watch Company at Waltham, Massachusetts discussed the idea of establishing a watch factory in the growing West with Chicago watchmaker, John C. Adams. Adams contacted several Chicago area investors including Benjamin W. Raymond, a former mayor of Chicago, about forming a watch company. On August 18, 1864, the National Watch Company of Chicago was organized with \$100,000 in capital and Raymond was elected president. Through Raymond's influence, the location of the factory was offered to Elgin on condition that a site of 35 acres be deeded to the company and \$25,000 of stock be raised by the town's residents.^{3,4}

The Dexter farm south of the city, adjoining the Chicago and North Western Railway tracks on the east side and the east bank of the Fox River was chosen. Four businessmen including Raymond purchased the entire 171 acre farm, donated the 35 acre site to the Watch

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Company, and subdivided the rest of the acreage into building lots. These investors, known in company lore as the "Four Immortals", also subscribed to the remaining balance of stock that hadn't been sold.⁵

In September 1864, company representatives traveled to Waltham, Massachusetts to recruit experienced watchmakers to start up the new factory. They persuaded seven, who became known as the "Seven Stars", to move to Elgin and work for the new company. Each were given a \$5,000 bonus, a five-year contract at \$5,000 per year, and an acre lot to build a home. In January 1865 a temporary three story wooden building was hastily erected over the east side mill race and manufacturing began.⁶

The company was restructured and refinanced at a half a million dollars and the general offices were established in Chicago in 1865. Work on a three story limestone and brick facility on National Street began early in the spring of 1865.⁷ To provide housing for the workers, the company in 1867 completed a large three story brick boarding house, called the National House. It was located across the street from the watch factory and was expanded many times as the number of workers increased at the factory. The National House was demolished in 1923.⁸

The first watch, named the B. W. Raymond, after the company's first president, was placed on the market on April 1, 1867. The National Watch Company made watch movements only. Local jewelers would case each watch according to the customer's taste and purse. The first watches were key winds, the company did not issue its first stem winder until 1873.⁹

The watches were an immediate hit with consumers. In 1867, the factory turned out 18,000 movements, and 26,000 in 1868. By 1870, 527 employees were making 130 movements per day. During the 1870s the factory complex continued to expand to meet the growing demand for the watches. Customers began asking for the watch made in Elgin, despite the fact that the name "National" was used on all the dials. In 1874, the company bowed to public pressure and renamed the firm the Elgin National Watch Company.¹⁰

Company advertising was through circulars, almanacs, pictorial engravings, and newspapers. The company trademark was a cartoon figure of a winged Father Time holding an Elgin watch in one hand and a scythe in the other. On the ground was a broken hour glass. In 1886 a new approach to advertising was begun with the formation of the sixty-

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member Elgin National Watch Factory Military Band. The band filled engagements for expositions, banquets, ceremonies, and parades throughout the Midwest and South.¹¹

In May 1880 the company's employees numbered over 1100 and its daily production was 500 movements. In 1891 employment was over 3,000 and its production was 1800 movements per day.¹² The four-story National Gymnasium for the employees' benefit was built in 1890 next to the National House. The building had rehearsal space for the band as well as recreational facilities. In 1937, the National Gymnasium was demolished.¹³

In 1901 the Elgin National Watch Company manufactured and sold more than 600,000 movements of the 1,875,769 produced by all thirteen watchmaking companies in the United States. By 1907 the company's labor force numbered 3,200 with a daily output of about 2,700 movements.¹⁴

In 1910, in a bold masterful stroke the Elgin National Watch Company chose to build its own time observatory to insure the scientific accuracy of its famous timepieces. To full appreciate the significance of the construction and subsequent use of the Elgin Observatory it is important to understand the national circumstances that precipitated its construction and the company's reasoning for that construction.

At the turn of the century a burgeoning industrial America began to regard timing efficiency as an economic factor and sought ways to further harness time to human terms. The railroad industry, in particular, needed accuracy in its timepieces. The increasing number and frequency of rail traffic demanded better time keeping, both for the efficiency of daily operations and the safety of the passengers.

After 1865 America's railroads moved with enormous growth from their pioneer period of small, light trains into their mature era in which trains were long, heavy and crowded with passengers. As traffic increased and it became necessary to run many trains close together, the threat of rear-end collisions increased alarmingly. If the number of passengers on a scheduled train exceeded the capacity of one train, the company would often put an extra train on the one scheduled. In other words, there were actually two trains for one that was scheduled. The second train would follow the first at a distance of a few hundred yards; the trains were within sight of each other, except when the first disappeared for a time around a curve.

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When train speeds increased to 35 to 45 miles per hour, a very real danger from rear-end smashups arose. Clearly, the practice of operating a single train in sections presented a good many dangers, as it was difficult to coordinate the speeds and distances between the separate units running together. Often collisions resulted when the first unit slowed, stopped or broke down. Consequently, sections after 1870 usually ran five minutes apart, not within sight of each other. This time interval system nevertheless had inherent difficulties. How was the engineer of the following train to know that he was precisely five minutes behind the train ahead? Disastrous rear-end accidents occurred when the time interval between sections failed. In fact, rear-end collisions remained the single worst type railroad accident for fifty years after 1870.¹⁵

Moreover, many undoubtedly believe this nation's time has always been the logical, orderly system of four time zones enjoyed today. However,

.....time was a fairly chaotic affair, set locally by cities and towns, quite independently of any other place. The growth of the railroads made the confusion impossible. When solar time was noon in Chicago. . . it was 12:31 in Pittsburgh, 12:24 in Cleveland, 12:13 in Cincinnati, 12:09 in Louisville, 12:07 in Indianapolis, 11:50 in St. Louis, 11:48 in Daybook, 11:41 in St. Paul, 11:27 in Omaha. There were for example, thirty-eight different times in Wisconsin. There were three different clocks in the Buffalo station, and six different times in Pittsburgh, depending on the railroad. That such nonsense had to stop was obvious . . . Congress did not bestow its blessing on the system that railroads gave us until 1918.¹⁶

With no national time standards and a tremendous increase in rail traffic, the need for more efficient time standards became evident. When President Theodore Roosevelt called for the U.S. Bureau of Standards to set up tests for watches, it was disclosed in 1908 that the nation's time controls were inadequate.

To obtain the accuracy of pulsations, the beats or ticks of a watch must conform precisely with the interval of time it is to measure. The lack of facilities with which to provide timing precision would introduce a factor of guesswork in watch manufacturing. Already at the forefront of watch manufacturing, the Elgin National Watch Company chose to

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build its own observatory to insure the scientific accuracy of its famous timepieces. Built in 1910 under the direction of Dr. William W. Payne of the Goodsell Observatory, the Elgin Observatory's purpose was to observe and record precise time from the stars and to transmit that measure of time throughout the workshops and timing laboratories of the Elgin National Watch Factory. Payne became the first director for the Observatory.¹⁷

During the early years of the operation of the Elgin National Watch Company Observatory the most constant and unchanging motion in the universe was thought to be the rotation of the earth. So the earth becomes a perfect clock. When the earth completes one rotation the interval of time is known as a day. A way to check the earth's rotation was to relate it to fixed stars. Fixed stars are those stars that are so distant that over a period of time they would not appear to change positions in the sky. A north-south line or meridian line was adopted as line of reference. By observing the time a fixed star would cross the meridian line and then observing that same star cross the meridian again, the interval between these two crossings of the meridian would determine the sidereal day. A sidereal day represents the exact period of time needed for the earth to make one complete rotation on its axis. It would be the function of the sidereal clock to keep this kind of time. In the clock vault of the Observatory, Riefler Clock No. 220 was designated as the sidereal clock. Riefler Clock No. 224 would be the mean solar time clock. It would be from star time (sidereal time) that one would be able to calculate the mean solar time (time our watches keep). From these facts the slogan "Elgin Takes The Time From The Stars And Puts It In Your Pocket" was used by the Elgin National Watch Company in the sale of their watches.¹⁸

In the Observatory is located a meridian transit telescope. This telescope points only along the north-south observer's meridian line. The shutters to the Observatory open up the same way. The position of all bright stars in the sky were known with great accuracy for hundreds of years. From this information the U.S. Naval Observatory in Washington, D.C. would publish the American Ephemeris and Nautical Almanac each year giving the exact moment the star would cross an observer's meridian. A table in the Almanac would include the hour, minute, second, and thousandth of a second when each star is to cross the meridian line. In the eyepiece of the telescope were located 11 vertical wires. Actually, these wires were spider web strands. Spider web strands were chosen because they were so minute, yet extremely strong. A star would appear in the eyepiece of the telescope as a bright point of light moving along two other horizontal lines. As the star moved through the eyepiece, the astronomer would press a button every moment that the star would line up with one of the eleven vertical strands. This would send an impulse signal to the chronograph. Later this

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procedure changed slightly. Instead of pressing a button the astronomer would follow the star by use of a larger micrometer screw. The head of the micrometer would make electrical contacts with each strand and would then send a signal to the chronograph.

The chronograph was electronically hooked up to the sidereal clock. A record sheet was located on the cylindrical drum of the chronograph. The drum would make exactly one revolution per minute. A recording pen would leave a mark on the recording sheet. When the pen was connected to the impulses of the sidereal clock the pen would move sideways leaving a mark that would represent one second of time. The fifty-ninth second was omitted to show where the minute began. As the astronomer would observe a star by either pressing the button or making electrical contacts with the strands, these impulses would also be sent to the chronograph. The result was an odd jiggly line that was traced out on the recording sheet of the chronograph. There were eleven deflections that represent the crossing of the star. The eleven marks corresponded to the eleven spider web strands. The time, by the sidereal clock, that the star crossed the meridian was obtained by placing a graduated scale on the recording sheet of the chronograph. In this manner each mark is read and the average of the eleven marks was the observed time by the clock when the star crossed the meridian. The difference between the correct time (information obtained by the American Ephemeris and Nautical Almanac) and the observed time (obtained from the recording sheet of the chronograph) is the amount that the clock was in error. Ten or more stars were observed on clear nights and the average of all the observations taken would give an accuracy of one-hundredth of a second. By making two daily comparisons with the sidereal clock, the mean time clock could maintain an error of less than ten hundredths of a second. In every room of the watch factory, where the movements were rated, one could hear the sounder telling the seconds. It sounded like the tick from a telegraph instrument. In "Know Your Product" by Frank Urie, second director of the observatory, wrote,

"Here is where the hear-beats of the master clock make time-correct time-for the world, for each day our factory sends out along the avenues of trade thousands of watches, and the one voice of authority to which they are attuned is the pulse-beat of the master clock, whose authority is derived, through its sidereal sister and the telescope, from the stars-those fixed, flaming markers of the heavens from which astronomers have learned that the rotation of the earth does not vary one-hundredth of a second. The manufacture of watches is dependent upon the accuracy of the timepiece with which they are compared while these adjustments are being affected. Any error in the master

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time-piece will cause a corresponding error in the adjustment and regulation of the watches, no matter how skillfully and accurately the adjuster may do his work."

It was to this standard that Elgin National Watch Company through the Observatory could promote and sell their watches. The Observatory was the only time observatory in the world created by a watch manufacturer for the sole purposes of calculating time by the stars.¹⁹ It was an immediate public relations stroke of genius, built as a manufacturer's scientific response to precisely satisfy a national consumer need while boosting the company's financial position. Standards to assure uniformity and precision, when tied to the Company's publicity and retail pledge of accuracy and excellence were translated into economic gain.

From the Observatory's debut in 1910, in the pre-World War I boom days, during the war years and the increase in sales as dough boys craved the freedom of a wrist watch instead of a pocket watch in combat, to world-wide exposure at Chicago's Century of Progress Exposition, and through the difficult Depression years, the Observatory was consciously and conspicuously made the heart of the Elgin National Watch Company's advertising campaign.

The scientific precision represented by the Observatory's domed silhouette became synonymous with the excellence to be expected of an Elgin watch. In fact, the Observatory became a symbol for the product and company itself.

The Observatory was also a United States Weather Station which was equipped with thermometers, a thermograph, psychrometer, barometer, barograph, rain gauges, and weather vane. In addition to the daily weather reports sent to Springfield, Illinois for government use, local daily reports were also furnished to the local newspapers. Twice each day, a weather report was also sent to the Elgin National Watch Company's factory, where humidity conditions had a vital bearing upon certain delicate processes of watch manufacture.²⁰

The Elgin National Watch Company dominated the domestic watch industry in the 1920s. Output at the factory throughout the decade averaged one million movements annually, more than half other domestic watch production and more than twice what the closest competitor, Waltham, was turning out. In November 1926, there were 4,370 employees on the Elgin payroll.²¹ The Depression during the 1930s hit the Elgin National Watch Company hard and production and employee numbers fell dramatically. During World

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War II, the watch factory manufactured mechanical time fuses for the U.S. government's war effort.

After the war, the Swiss watch industry, aided by government subsidies dominated the market. Elgin and other domestic watch manufacturers had to lay off hundreds of workers due to the aggressive competition. The challenge of low-priced imports was more effectively met by the U.S. Time Corporation, which introduced the Timex Watch in 1950. This non-jeweled watch with a simplified movement was so cheap that it could be discarded and a new watch purchased at less than the ordinary cost of repair. The Elgin National Watch Company began diversifying operations and ending its watch manufacturing in the late 1950s. In 1960 the Observatory was turned over to the Elgin School District.

By 1964 the company had only 900 on its payroll in Elgin and the following year due to increased competition, the company closed and began demolition of the factory complex. On October 3, 1966 the main tower of the factory was demolished.²²

Today, the Elgin Observatory represents the excellence of the Elgin watch and the company which produced it, the product and industry with which the city will forever be associated. It is this connection of time and idea that most fully explains the significance of the Elgin Observatory.

Endnotes

1. Alft, E. C., Elgin: An American History, Elgin, Illinois: Daily Courier-News, 1985, p. 4-5.
2. Ibid, p. 20.
3. Ibid. p. 49-50.
4. Lowrie & Black, pub., Elgin Today, 1904, Elgin, Illinois: Lowrie & Black, Publishers, 1904.
5. Alft, E. C., Elgin: An American History, Elgin, Illinois: Daily Courier-News, 1985, p.50.

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6. Ibid, p. 50-51.
7. Ibid, p. 51, 55.
8. Dailler, Hazel, compiler, The Elgin National Watch Company, Elgin, Illinois: The National Secretaries Association, Elgin Chapter, 1976.
9. Alft, E. C., Elgin: An American History, Elgin, Illinois: Daily Courier-News, 1985, p. 58-60.
10. Ibid, p. 58-60.
11. Ibid, p. 63.
12. Ibid, p. 60.
13. Dailler, Hazel, compiler, The Elgin National Watch Company, Elgin, Illinois: The National Secretaries Association, Elgin Chapter, 1976.
14. Alft, E. C., Elgin: An American History, Elgin, Illinois: Daily Courier-News, 1985, p.148-149.
15. Reed, Robert C., Train Wrecks. A Pictorial History of Accidents on the Main Line, New York: Bonanza Books, 1968, p. 71.
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17. Urie, Frank D., "Do You Know How Time is Determined?" The Watch Word, Elgin, Illinois: Elgin National Watch Company, Employees Advisory Council, Volume 7, July 1922, p.8-10.
18. Urie, Frank D., "Know Your Product", The Watch Word, Elgin, Illinois: Elgin National Watch Company, Employees Advisory Council, Vol. 13, No. 11, November 1936, p. 6-10.
19. Urie, Frank, D., "Know Your Product", The Watch Word, Elgin, Illinois: Elgin National Watch Company, Employees Advisory Council, Vol. 13, No., 11, November 1936, p. 6.

United States Department of the Interior
National Park Service

National Register of Historic Places Continuation Sheet

Section number 8 Page 13

Elgin National Watch Company Observatory

20. Time Taking TimeKeeping, Elgin, Illinois: Elgin National Watch Company, 1922.

21. Alf, E. C., Elgin: An American History, Elgin, Illinois: Daily Courier-News, 1985, p. 206-208.

22. Ibid, p. 278.

United States Department of the Interior
National Park Service

National Register of Historic Places Continuation Sheet

Section number 9 Page 14

Elgin National Watch Company Observatory

Bibliography

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- Urie, Frank D., "Know Your Product", The Watch Word, Elgin, Illinois: Elgin National Watch Company, Employees Advisory Council, Vol. 13, No. 11, November 1936.

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National Park ServiceNational Register of Historic Places
Continuation SheetSection number 10 Page 15

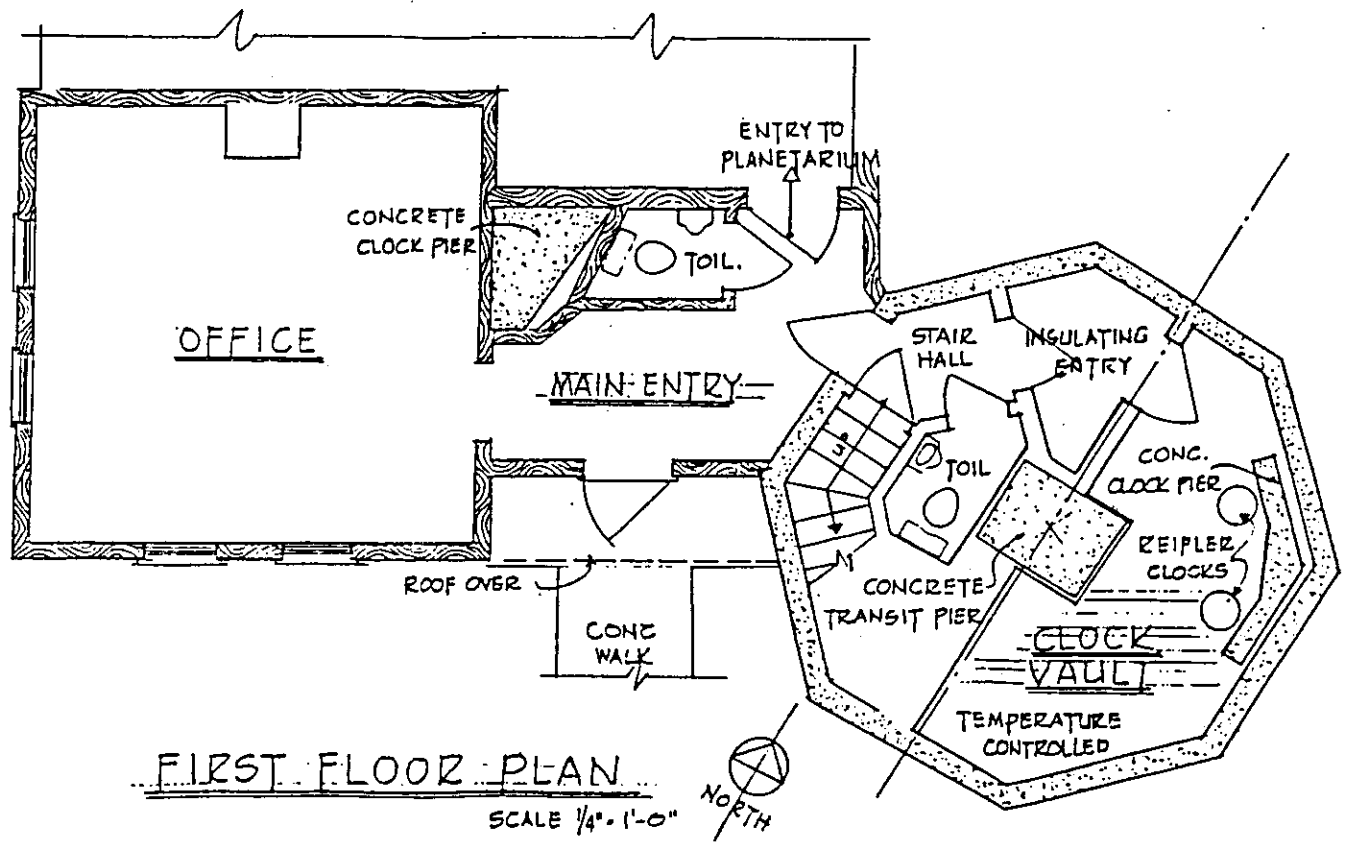
Elgin National Watch Company Observatory

VERBAL BOUNDARY DESCRIPTION

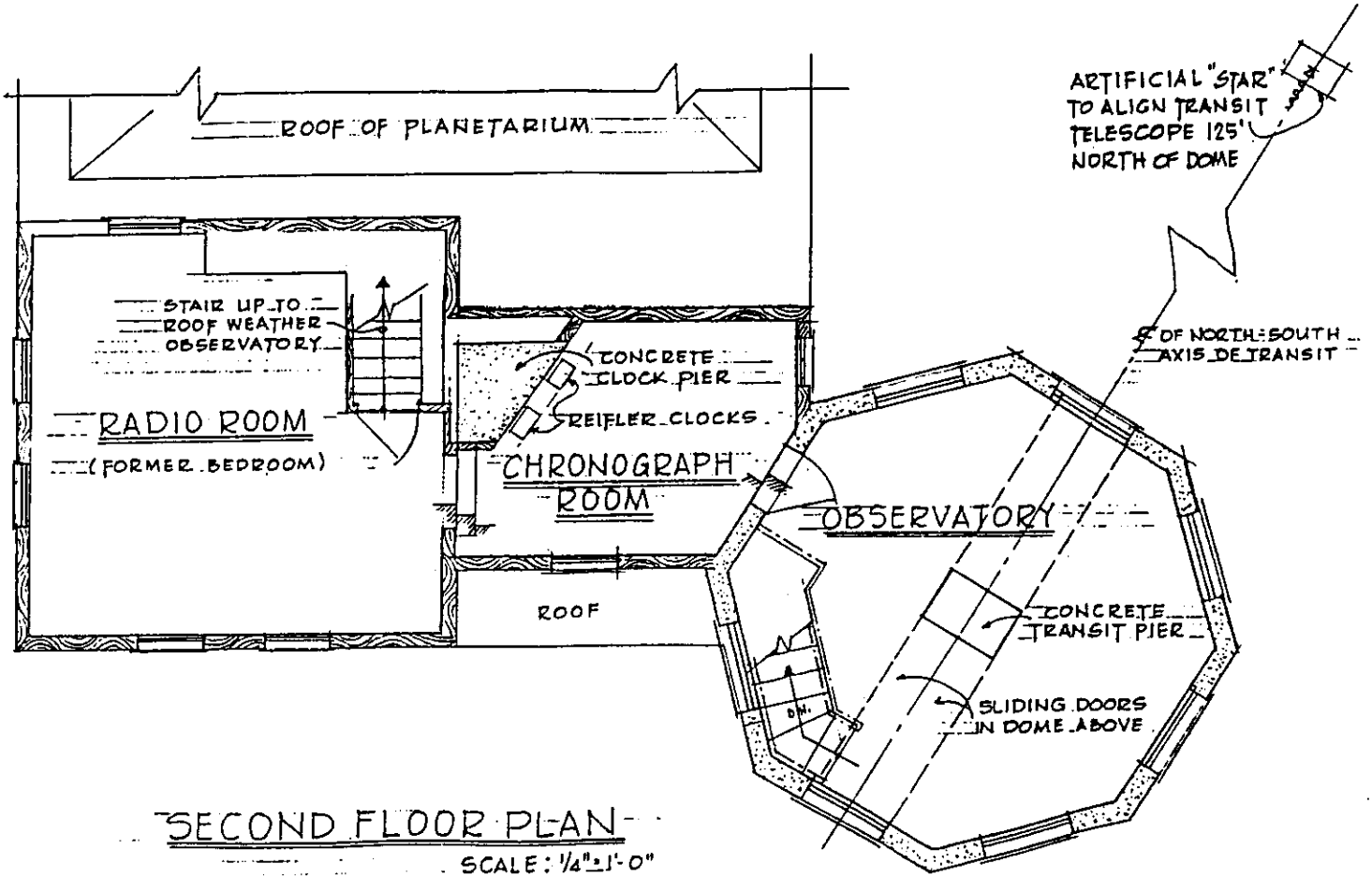
The nominated property occupies part of lots 6 and 7 in Block 6 of Sherman's Addition to the City of Elgin described as follows: Beginning at the Southwest corner of Lot 7; thence Northeasterly along the Southeasterly line of said Lot 7 a distance of 187.47 feet to a point 86.0 feet from the Southeast corner of said Lot 7; thence Northwesterly parallel with the Northeasterly line of Lot 7 and parallel with the Northeasterly line of Lot 6 a distance of 191.28 feet; thence Southwesterly along a line that forms an angle of 85 degrees 45 minutes to the left with the prolongation of the last described course a distance of 34.14 feet; thence Southeasterly along a line that forms an angle of 94 degrees 15 minutes to the left with the prolongation of the last described course a distance of 60.0 feet; thence Southwesterly along a line that forms an angle of 85 degrees 45 minutes to the right with the prolongation of the last described course a distance of 67.6 feet to a point in a line 82.5 feet Northeasterly (measured at right angles thereto) and parallel with the Southwesterly line of said Lot 7; thence Northwesterly along said parallel line a distance of 3.0 feet to a point in a line that is perpendicular to the Southwesterly line of said Lot 7 at a point in said Southwesterly line that is 132.0 feet Northwesterly of the place of beginning; thence Southwesterly along said perpendicular line a distance of 82.5 feet to a point in said Southwesterly line that is 132.0 feet from the place of beginning; thence Southwesterly along said Southwesterly line a distance of 132.0 feet to the place of beginning. Being situated in the City of Elgin, Kane County, Illinois.

BOUNDARY JUSTIFICATION

This lot was historically associated with the Elgin National Watch Company Observatory.



ELGIN NATIONAL WATCH COMPANY OBSERVATORY



ELGIN NATIONAL WATCH COMPANY OBSERVATORY



IN REPLY REFER TO:

United States Department of the Interior

NATIONAL PARK SERVICE

P.O. Box 37127

Washington, D.C. 20013-7127



RECEIVED

The Director of the National Park Service is pleased to inform you that the following properties have been entered in the National Register of Historic Places. For further information call 202/343-9542.

SEP 2 1994
Preservation Services
AUG 26 1994

WEEKLY LIST OF ACTIONS TAKEN ON PROPERTIES: 8/15/94 THROUGH 8/19/94

KEY: State, County, Property Name, Address/Boundary, City, Vicinity, Reference Number NHL Status, Action, Date, Multiple Name

ALABAMA, CALHOUN COUNTY, Southern Railway Passenger Station and Freight Depot, 126 W. 4th St., Anniston, 94000795, OWNER OBJECTION, 8/11/94

ARIZONA, PINAL COUNTY, Magma Hotel, 100--130 Main St., Superior, 94000981, NOMINATION, 8/19/94

ARIZONA, YAVAPAI COUNTY, Prescott Armory Historic District, Roughly bounded by E. Gurley, E. Willis, N. Arizona, E. Sheldon and N. Rush Sts., Prescott, 94000829, NOMINATION, 8/15/94

ARKANSAS, CLEBURNE COUNTY, Dill School, AR 5/25 W side, N of Ida, Ida vicinity, 94000854, NOMINATION, 8/16/94 (Public School in the Ozarks MPS)

ARKANSAS, CLEBURNE COUNTY, Woman's Community Club Band Shell, NE corner of Spring Park, Heber Springs, 94000849, NOMINATION, 8/16/94

ARKANSAS, CLEVELAND COUNTY, Attwood--Hopson House, AR 8, N side, New Edinburg, 94000848, NOMINATION, 8/16/94

ARKANSAS, CRAIGHEAD COUNTY, Nash--Reid--Hill House, 418 W. Matthews Ave., Jonesboro, 94000852, NOMINATION, 8/16/94

ARKANSAS, GREENE COUNTY, Gulf Oil Company Service Station, Jct. of Main and S. Third Sts., SE corner, Paragould, 94000850, NOMINATION, 8/16/94

ARKANSAS, INDEPENDENCE COUNTY, Bartlett--Kirk House, 910 College St., Batesville, 94000856, NOMINATION, 8/16/94

ARKANSAS, LOGAN COUNTY, Chism, Dr. Stephen N., House, AR 23 E side, S of jct. with AR 217, Booneville vicinity, 94000853, NOMINATION, 8/16/94

ARKANSAS, POPE COUNTY, Riggs--Hamilton American Legion Post No. 20, 215 N. Denver Ave., Russellville, 94000855, NOMINATION, 8/15/94

ARKANSAS, PULASKI COUNTY, First Baptist Church, Jct. of 12th and Louisiana Sts., SW corner, Little Rock, 94000823, NOMINATION, 8/09/94

ARKANSAS, RANDOLPH COUNTY, Hillyard Cabin, Old Burr Rd., W side, NE of Warm Springs, Warm Springs vicinity, 94000851, NOMINATION, 8/16/94

CALIFORNIA, CONTRA COSTA COUNTY, Danville Southern Pacific Railroad Depot, 355 Railroad Ave., Danville, 94000860, NOMINATION, 8/16/94

COLORADO, CONEJOS COUNTY, Palace Hotel, 429 Main St., Antonito, 94001013, NOMINATION, 8/19/94

COLORADO, DENVER COUNTY, Lewis, A. T., New Building, 1531 Stout St., Denver, 94001006, NOMINATION, 8/19/94

COLORADO, FREMONT COUNTY, Christ Episcopal Church, 802 Harrison Ave., Canon City, 94001011, NOMINATION, 8/19/94

COLORADO, MESA COUNTY, Handy Chapel, 202 White Ave., Grand Junction, 94001012, NOMINATION, 8/19/94

DELAWARE, NEW CASTLE COUNTY, Walnut Green School, Jct. of DE 82 and Owl's Nest Rd., Greenville vicinity, 94001014, NOMINATION, 8/19/94

IDAHO, IDAHO COUNTY, Cold Meadows Guard Station, NE of McCall, Frank Church--River of No Return Wilderness, Payette NF, McCall vicinity, 94001017, NOMINATION, 8/19/94

ILLINOIS, COLES COUNTY, Railway Express Agency Building, 1804 Western Ave., Mattoon, 94000974, NOMINATION, 8/16/94

ILLINOIS, COLES COUNTY, Starr Hotel, 1913--1923 Western Ave., Mattoon, 94000975, NOMINATION, 8/16/94

ILLINOIS, COOK COUNTY, Edgewater Beach Apartments, 5555 N. Sheridan Rd., Chicago, 94000979, NOMINATION, 8/16/94

ILLINOIS, GRUNDY COUNTY, Coleman Hardware Company Building, 100 Nettle St., Morris, 94000980, NOMINATION, 8/16/94

ILLINOIS, KANE COUNTY, Arcada Theater Building, 105 E. Main St. and 1st Ave., St. Charles, 94000977, NOMINATION, 8/16/94

ILLINOIS, KANE COUNTY, Elgin National Watch Company Observatory, 312 Watch St., Elgin, 94000976, NOMINATION, 8/16/94

ILLINOIS, WILL COUNTY, Heck, John, House, 1225 S. Hamilton St., Lockport, 94000978, NOMINATION, 8/16/94

ILLINOIS, WOODFORD COUNTY, El Paso Public Library, 149 W. First St., El Paso, 94000972, NOMINATION, 8/16/94 (Illinois Carnegie Libraries MPS)

ILLINOIS, WOODFORD COUNTY, Illinois Central Railroad and Toledo, Peoria, and Western Railroad Freight House, 8--10 E. Front St., El Paso, 94000973, NOMINATION, 8/16/94

MARYLAND, CARROLL COUNTY, Union Bridge Historic District, Roughly bounded by Bellevue, E. Locust, Buttersburg Alley, Church, Whyte, W. Locust and the Western Maryland RR tracks, Union Bridge, 94000820, NOMINATION, 8/17/94

MASSACHUSETTS, WORCESTER COUNTY, Grafton State Hospital, Jct. of Westborough Rd. and Green St., Grafton, 94000691, OWNER OBJECTION, 8/08/94 (Massachusetts State Hospitals MPS)

MONTANA, BLAINE COUNTY, Dave's Texaco, 237 Pennsylvania St., Chinook, 94000862, NOMINATION, 8/16/94 (Roadside Architecture Along US 2 in Montana MPS)

MONTANA, BLAINE COUNTY, Young Brothers Chevrolet Garage, 201 Pennsylvania St., Chinook, 94000867, NOMINATION, 8/16/94 (Roadside Architecture Along US 2 in Montana MPS)

MONTANA, HILL COUNTY, Heltne Oil Company, 140 First St., Havre, 94000865, NOMINATION, 8/16/94 (Roadside Architecture Along US 2 in Montana MPS)

ILLINOIS HISTORIC SITES SURVEY INVENTORY

201153

1. Name of Site:

Common Elgin Nat'l Watch Co. Observatory & Planetarium
Historic

2. Location:

Street and Number 312 Watch St. Township Elgin Section
City or Town Elgin Zip Code 60120 Range 1/4 Section
County Kane

3. Classification:

Category (check one) Integrity (check one)
() District (x) Building (x) Altered () Unaltered
() Site () Structure () Moved (x) Original Site

4. Ownership:

() Private (x) Occupied
(x) Public () Unoccupied
() Preservation work in progress

Access to Public

(x) Yes () Restricted () Unrestricted () No

Present Use (check one or more)

() Agricultural () Industrial () Religious
() Commercial () Military () Scientific
(x) Educational () Museum () Transportation
() Entertainment () Park () Other (specify)
() Government () Private Residence

5. Ownership of Property:

Owner's Name Elgin Public Schools Phone Number 741-6800
Street and Number 4 S. Gifford St.
City or Town
State Ill County Kane Zip Code

6. Description:

(x) Excellent () Good () Fair () Deteriorated () Ruins () Unexposed

Is there a program of preservation underway? (x) Yes () No

INDUSTRIAL DEVELOPMENT

7. Historical Themes : (check one or more of the following)

- Archeological Site (Pre-Columbian)
- Archeological Site (Post-Columbian to 1673)
- French Influence (1673-1780)
- Illinois Frontier (1780-1818)
- Illinois Early (1818-1850)
- Illinois Middle (1850-1900)
- Illinois Late (1900-present)
- Famous People (give names & dates)

8. Specific Date:

Areas of significance (check one or more of the following)

- Aboriginal (historic)
- Aboriginal (pre-historic)
- Agriculture
- Architecture
- Art
- Commerce
- Communication
- Conservation
- Education
- Engineering
- Industry
- Invention
- Landscape Architecture
- Literature
- Military
- Music
- Political
- Religion/Philosophy
- Science
- Sculpture
- Social/Humanitarian
- Theater
- Transportation
- Urban Planning
- Other (specify)

Brief statement of significance: (include all names and dates) Use additional sheets if necessary. Opened 1910 to time watches by the stars.

9. Form prepared by:

Name and Title: Alft Date: _____

Organization: _____ Phone: _____

Street and number: _____

City or Town: _____ County: _____ Zip Code _____

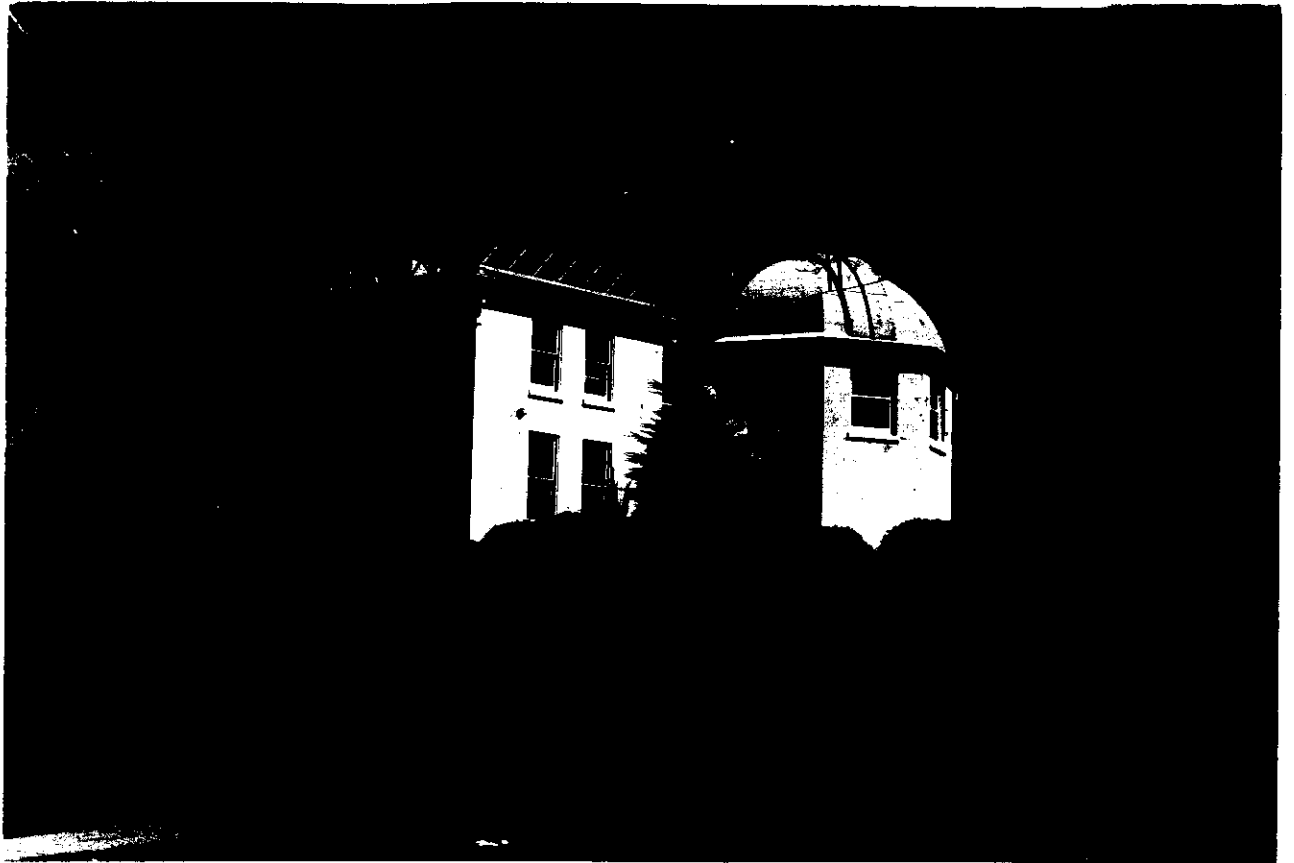
During the course of the Survey we often find it necessary to search for references for a particular site. When filling out the Survey form, please list according to the following example, published references to the site for which forms are being completed. If a bibliography can be compiled, it will greatly deduct from the Survey's task.

Bibliography

Robertson, Robert, Of Whales and Men. New York, Alfred K. Knopf, Inc., 1954.

Only building left standing of what was once the world's largest watch factory com Only watch co. in world to have maintained its own observatory. Now used for scier education in Elgin Public Schools.

The Watch World, Vol. 23, No. 4, September, 1949, pp. 33 and 54.



ILLINOIS HISTORIC SITES SURVEY INVENTORY

SURVEY USE ONLY

1. Name of Site:

Common **Elgin National Watch Co. Observatory & Planetarium**

Historic

- Archaeology
- Architecture
- History

2. Location:

Street and Number

312 Watch Street

City or Town

Elgin

County

Kane

Zip Code

60120

Township

Elgin

Range

Section

1/4Section

3. Classification:

Category (Check one)

- District
- Site

- Building
- Structure

Integrity (Check one)

- Altered
- Unaltered
- Moved
- Original Site

4. Ownership

- Private
- Public

Status (check one)

- Occupied
- Unoccupied
- Preservation work in progress

Access to Public

- Yes
- Restricted
- Unrestricted
- No

Present Use (check one or more)

- Agricultural
- Commercial
- Educational
- Entertainment
- Government
- Industrial
- Military
- Museum
- Park
- Private Residence
- Religious
- Scientific
- Transportation
- Other (specify)

5. Ownership of Property

Owner's Name **Elgin Public Schools**

Street and Number **4 S. Gifford St.**

City or Town **Elgin**

State **Illinois**

County

Phone Number

312-741-6800

Zip Code

6. Description

Kane

Condition

- Excellent
- Good
- Fair
- Deteriorated
- Ruins
- Unexposed

Is there a program of preservation underway? Yes No

7. Historical Themes: (check one or more of the following)

- | | | |
|-------------------------------------|---------------------|--------------------------|
| <input type="checkbox"/> | Archaeological Site | (pre-Columbian) |
| <input type="checkbox"/> | Archaeological Site | (post-Columbian to 1673) |
| <input type="checkbox"/> | French Influence | (1673-1780) |
| <input type="checkbox"/> | Illinois Frontier | (1780-1818) |
| <input type="checkbox"/> | Illinois Early | (1818-1850) |
| <input type="checkbox"/> | Illinois Middle | (1850-1900) |
| <input checked="" type="checkbox"/> | Illinois Late | (1900-present) |
| <input type="checkbox"/> | Famous People | (Give names & dates) |

8. Specific Date:

Areas of Significance (check one or more of the following)

- | | | | |
|-------------------------------------|---------------------------|--------------------------|---------------------|
| <input type="checkbox"/> | Aboriginal (historic) | <input type="checkbox"/> | Literature |
| <input type="checkbox"/> | Aboriginal (pre-historic) | <input type="checkbox"/> | Military |
| <input type="checkbox"/> | Agriculture | <input type="checkbox"/> | Music |
| <input type="checkbox"/> | Architecture | <input type="checkbox"/> | Political |
| <input type="checkbox"/> | Art | <input type="checkbox"/> | Religion/Philosophy |
| <input type="checkbox"/> | Commerce | <input type="checkbox"/> | Science |
| <input type="checkbox"/> | Communication | <input type="checkbox"/> | Sculpture |
| <input type="checkbox"/> | Conservation | <input type="checkbox"/> | Social/Humanitarian |
| <input checked="" type="checkbox"/> | Education | <input type="checkbox"/> | Theater |
| <input type="checkbox"/> | Engineering | <input type="checkbox"/> | Transportation |
| <input checked="" type="checkbox"/> | Industry | <input type="checkbox"/> | Urban Planning |
| <input type="checkbox"/> | Invention | <input type="checkbox"/> | Other (specify) |
| <input type="checkbox"/> | Landscape Architecture | | |

Brief statement of significance: (include all names and dates). Use additional sheets if necessary. **Opened in 1910 to time watches by the stars.**

9. Form prepared by:

Name and Title: E. C. Alft, Director Date: June, 24, 1972

Organization: Elgin Area Historical Society

Street and Number 1217 Mohawk Drive

City or Town Elgin County Kane Zip Code _____

Phone Number 312-742-0169

During the course of the Survey we often find it necessary to search for references for a particular site. When filling out the Survey form, please list according to the following example, published references to the site for which forms are being completed. If a bibliography can be compiled, it will greatly deduct from the Survey's task.

Bibliography

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