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Nat. Register of Historic Places  
National Park Service

United States Department of Interior  
National Park Service

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 Mirro Aluminum Company Plant #3  
other names/site number

2. Location

street & number	2402 Franklin Street	N/A	not for publication
city or town	Manitowoc	N/A	vicinity
state Wisconsin	code WI	county Manitowoc	code 071
			zip code 54220

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.)

  
Signature of certifying official/Title  
State Historic Preservation Officer - Wisconsin

Date 6/6/16

State or 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 commenting official/Title

Date

State or Federal agency and bureau

Mirro Aluminum Company Plant #3

Manitowoc

Wisconsin

Name of Property

County and State

**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.

See continuation sheet.

removed from the National Register.

other, (explain:)

Signature of the Keeper

*by Barbara Wyatt*

7-26-16  
Date of Action

**5. Classification**

**Ownership of Property**  
(check as many boxes as  
as apply)

private  
 public-local  
 public-State  
 public-Federal

**Category of Property**  
(Check only one box)

building(s)  
 district  
 structure  
 site  
 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
0	0 objects
1	0 total

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

N/A

**Number of contributing resources  
previously listed in the National Register**

0

**6. Function or Use**

**Historic Functions**

(Enter categories from instructions)  
INDUSTRY/manufacturing facility

**Current Functions**

(Enter categories from instructions)  
VACANT/Not in use

**7. Description**

**Architectural Classification**

(Enter categories from instructions)

LATE 19<sup>TH</sup> & EARLY 20<sup>TH</sup> CENTURY AMERICAN  
MOVEMENTS/Commercial Style

**Materials**

(Enter categories from instructions)

foundation CONCRETE

walls BRICK

roof SYNTHETICS

other STONE (limestone)

**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 the 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)

INVENTION

**Period of Significance**

1957-1962

**Significant Dates**

**Significant Person**

(Complete if Criterion B is marked)

N/A

**Cultural Affiliation**

N/A

**Architect/Builder**

Dolke, Jr., William Fred

**Narrative Statement of Significance**

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

See attached continuation sheets.

Mirro Aluminum Company Plant #3  
Name of Property

Manitowoc  
County and State

Wisconsin

## 9. Major Bibliographic References

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

### Previous Documentation on File (National Park Service):

- 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 1 acre

UTM References (Place additional UTM references on a continuation sheet.)

1 16 445684 4882194  
Zone Easting Northing

3 \_\_\_\_\_  
Zone Easting Northing

2 \_\_\_\_\_  
Zone Easting Northing

4 \_\_\_\_\_  
Zone Easting Northing

See Continuation Sheet

Verbal Boundary Description (Describe the boundaries of the property on a continuation sheet)

See attached continuation sheets.

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

See attached continuation sheets.

## 11. Form Prepared By

name/title	Emily Ramsey and John Cramer	date	May 2016
organization	MacRostie Historic Advisors	telephone	(312) 213-9630
street & number	53 W. Jackson Boulevard, Suite 1142	zip code	60604
city or town	Chicago	state	IL

Mirro Aluminum Company Plant #3  
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Manitowoc  
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Wisconsin

### 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 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.)

<b>name/title</b>	Attn: Todd Hutchinson	<b>date</b>	May 2016
<b>organization</b>	Wisconsin Redevelopment LLC	<b>telephone</b>	414-7914222
<b>street &amp; number</b>	3316 North Summit Avenue	<b>zip code</b>	53211
<b>city or town</b>	Milwaukee	<b>state</b>	WI

**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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Mirro Aluminum Company Plant #3  
Manitowoc, Manitowoc County, WI

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Start description on line below

**Narrative Description**

**Summary**

The Mirro Aluminum Company Plant #3 (hereafter noted as “Mirro Plant #3”) is located at the northeast corner of Franklin Street and South 25<sup>th</sup> Street, just west of the center of downtown Manitowoc. The five-story building is roughly rectangular in plan with a concrete foundation, timber and steel structure, brick exterior walls, and a flat roof. Two brick penthouses at the east and west end of the roof mark the location of the elevators and stairs. The main entrance to the building is located at the east end of the south elevation; a secondary entrance is located at the north end of the west elevation. The building is regularly fenestrated primarily with industrial steel sash windows in large rectangular openings. A number of window openings on the first and second stories are covered with non-historic corrugated panels. A one-story metal-clad storage facility addition, completed in the 1970s, is located to the east side of the building. Mirro Plant #3 was designed by W. Fred Dolke, Jr. (1887-1975), a noted Chicago-based industrial architect. . The building was owned and operated by the Mirro Aluminum Company (originally the Aluminum Goods Manufacturing Company) from its opening in 1929 through the early 2000s, when Mirro ceased operations in Manitowoc. The building retains good architectural integrity.

A non-historic one-story metal-clad utility addition with a flat roof and concrete foundation abuts the east side of the building. The addition, completed in the 1970s, is highly utilitarian and features no character defining features or finishes. It features two loading doors off the primary south elevation fronting Franklin Street and two pedestrian entrances off of the east elevation. The addition is entirely clad in corrugated metal paneling and features a small band of window openings along the east and north elevations. Window openings are currently boarded up with wood panels.

**Site and Setting**

The Mirro Plant #3 is located on the western edge of downtown Manitowoc, on a roughly rectangular lot bounded on the south by Franklin Street, on the east by 24<sup>th</sup> Street, on the west by 25<sup>th</sup> Street, and on the north by the Chicago & NorthWestern Railroad. The area immediately surrounding the building is occupied primarily by single-family residences. Low commercial buildings are spread out along Franklin Street. West of the building on Franklin is a vacant lot, and east of the building is a one-story commercial structure. The building is built up to the lot line on all sides and is bordered by concrete sidewalks on the south, west, and east.

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**Exterior**

*South Facade (Franklin Street)*

The primary facade of the Mirro Plant #3 is the long south facade fronting onto Franklin Street. The historic facade is sixteen bays wide. Above the concrete raised foundation and water table, unornamented brick piers and slightly recessed brick spandrels, laid in running bond, form a regular grid of large rectangular window openings with concrete sills and brick headers. The main entrance is located two bays in from the southeast corner of the building. The brick surround is unornamented save for a rectangular stone plaque above, inscribed with "1929," the building's date of construction, set in a frame of rowlock brick. On the west end of this side, two loading dock entrances (visible in historic photographs of the building) have been infilled with brick. The first story has thirteen window openings, all of which have been infilled or covered with non-historic corrugated panels. The seven easternmost openings also have smaller non-historic windows set within the corrugated panels. Above the first story, all of the window openings (one per bay, per story) have original industrial steel sash windows.

Metal scuppers are incorporated in alternating bays on the south elevation, to allow water from cleaning and other manufacturing processes to escape the building.

A non-historic one-story metal-clad addition extends off the east end of the building. The addition has three bays; a blank wall and two vehicle door bays. The addition is utilitarian without decorative features or finishes. Two non-historic loading doors provide direct access to Franklin Street. The south facade of the addition does not have any windows.

*North Facade*

The north (rear) facade, which follows the contour of the adjoining rail line, is similar in design to the south facade. The historic facade is fifteen bays wide, with fourteen window bays and an end bay that is a blank brick wall where a stair tower is located. The fourteen window bays are regularly fenestrated, with slightly projecting masonry piers and brick spandrel panels framing large rectangular window openings. Most of the north wall's original first story windows have been replaced with non-historic corrugated panels. One original loading entrance remains in use while two others have been infilled with brick and non-historic corrugated panels. Above the first story, large window openings retain their original steel sash windows.

A non-historic one-story metal-clad addition extends off the east end of the building. This addition is utilitarian without decorative features or finishes, and on this side is now a continuous blank wall. It has a narrow band of windows extending the entire length of the north wall but these window openings are currently boarded up with wood panels.

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*West Facade*

The building's west facade facing 25<sup>th</sup> Street is five bays wide. Its south three bays are regularly fenestrated with large rectangular window openings between brick piers and spandrels; the fourth window bay has tall, narrow windows. The fifth, northernmost bay is the elevator and stair tower, and is a brick wall fenestrated with smaller window openings, three per floor. A brick-clad rooftop penthouse extends above this northernmost bay. A service entrance with a pedestrian door is located at the north end of the 25<sup>th</sup> Street facade. All but three of the window openings on the west facade retain their original steel sash windows. The brick spandrels between the 2<sup>nd</sup>, 3<sup>rd</sup>, and 4<sup>th</sup> floors display ghost signing that reads "Aluminum Goods Mfg. Co." and "Plant 3."

*East Facade*

The original building's east facade is five bays wide and unfenestrated, save for a single bay of small window openings in the second southernmost bay, denoting the east stair. These window openings retain their original steel sash windows. A brick penthouse rises seamlessly above this bay. North of the stair, the east wall steps back slightly. Projecting unornamented brick piers separate the bays.

The first story is obscured by the one-story, metal-clad, storage facility addition, which was constructed in the 1970s on the site of the former Manitowoc Plating Works.

The non-historic one-story, metal-clad addition expands the entire length of the east wall, is utilitarian and without decorative features or finishes. The addition has a narrow band of windows extending along the north portion, and a single pedestrian entrance at both the south and north (currently boarded up) ends of the wall.

**Interior**

Typical of early twentieth century industrial buildings, the interior of the Mirro Plant #3 has primarily open, utilitarian spaces with no ornamentation. There are two original wood stairs and two original freight elevators, one each on the east and west ends of the building.

*Basement*

The building's basement contains outdated and abandoned mechanical equipment and storage. The basement features poured concrete floors, painted brick walls, and exposed mechanical systems. The space is utilitarian in character and displays no historic character-defining elements.



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*First Floor*

The building's 1<sup>st</sup> floor contains the building's main entry vestibule, non-historic offices and a large work area. The main entry vestibule at the southeast corner of the 1<sup>st</sup> floor is accessed by way of the main Franklin Street entrance. A short flight of steps with a painted metal tube railing connects the lower vestibule with the upper vestibule and the raised 1<sup>st</sup> floor. The lower vestibule is clad in exposed concrete flooring, exposed concrete and brick walls, and a non-historic painted drywall ceiling. The steps and upper vestibule are clad in terrazzo flooring with coved terrazzo wall base trim, exposed brick and non-historic painted drywall walls, and a non-historic painted drywall ceiling. Non-historic metal and wood doors connect the vestibule with a corridor and the east stair to the east and a non-historic office area to the west.

The east corridor and east stair area provide access by non-historic doors to an existing office and restroom. All of the spaces are clad in terrazzo flooring with coved terrazzo wall base trim, exposed brick and non-historic painted drywall walls, and non-historic painted drywall ceilings. The restroom contains non-historic fixtures. A steel interior window is set in the brick wall connecting the corridor with the east office.

The non-historic office area to the west of the vestibule was constructed by a previous owner. The office area is clad in non-historic linoleum tile covering original wood flooring, non-historic painted drywall clad columns, non-historic painted drywall partitions, and a non-historic dropped grid ceiling system.

The remainder of the 1<sup>st</sup> floor, a large work area with an open plan, exposed wood flooring, painted steel columns (many with concrete enclosures), painted steel beams, and painted wood clad ceilings, reflects the industrial character displayed throughout the building. The building's brick perimeter walls are exposed at the 1<sup>st</sup> floor and are painted. Non-historic partitions within the 1<sup>st</sup> floor work area were installed by a previous owner. Most of the 1<sup>st</sup> floor's wood flooring is fragmentary, damaged and deteriorated due to the space's previous industrial use, and some areas of flooring have been replaced with new wood flooring, poured concrete, or metal panels.

The 1<sup>st</sup> floor work area displays exposed mechanical, electrical, plumbing, and fire protection equipment throughout.

*Second through Fifth Floors*

The building's 2<sup>nd</sup> through 5<sup>th</sup> floors contain large open plan work space with exposed wood flooring, painted wood columns, painted steel beams, and ceilings showing the painted wood underside of the floor above. The building's brick perimeter walls are exposed at the 2<sup>nd</sup> through 5<sup>th</sup> floors and are painted. Non-historic partitions within the 2<sup>nd</sup> through 5<sup>th</sup> floor work areas were installed by a previous owner. Wood flooring on these floors is fragmentary, damaged, and in deteriorated condition due to the spaces' previous industrial use, and some areas of flooring have been replaced with new wood flooring, poured concrete pads, or metal panels.

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At the southwest corner of each upper floor there is a small enclosed office with restroom. The walls are of painted brick, the floors are of terrazzo and access is through non-historic doors. Industrial steel windows are set into the wall separating the southeast offices from the east stairs.

*Addition*

The non-historic one-story utility addition features a generally open floor plan with exposed steel beams, painted concrete block or brick walls, and wood floors. The loading entrance off the south end of the building sits slightly lower than the addition's primary space and features poured concrete floors. Restrooms and storage space are situated west of the loading dock. The interior of the addition features no character defining features or finishes.

**Integrity**

The Mirro Plant #3 retains good exterior and interior integrity. The building retains a majority of its original steel sash windows. Although the main entrance door has been replaced with a modern metal and glass door, the original entrance surround remains intact. The interiors display hallmarks of industrial buildings, with exposed structure and open, utilitarian spaces. The only major addition or alteration to the Mirro Plant #3 is the one-story utility addition on the building's east end constructed in 1970 after the period of significance. The addition was not constructed by Mirro and does not exhibit any character defining features or finishes. Although the addition has been connected to the original building internally, it does not detract from the building's historic integrity.

Overall, the Mirro Plant #3 retains sufficient integrity of location, setting, design, materials, workmanship, feeling and association to convey its significance under National Register Criterion A in the area of Invention as the place where the popular Mirro-Craft line of pleasure boats was developed, tested and produced. This building was the first production facility for these boats that the Mirro Company unveiled in the post-war period.

\_\_\_End of Description of Physical Appearance

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\_\_\_Insert Statement of Significance

**Statement of Significance**

**Summary**

Mirro Plant #3 is locally significant under National Register Criterion A in the area of Invention as the facility where the Mirro Aluminum Company's popular "Mirro-Craft" line of lightweight and inexpensive family pleasure boats was developed, tested and produced. The boats originated from the ingenuity and expertise of noted naval architect and industrial designer, David Beach (1918-2009). Beach, beginning c1957, developed the designs and experimented with innovative uses of materials and processes to manufacture pleasure boats for the Mirro Company. In response to changing manufacturing and consumer trends after World War II, Mirro expanded beyond its more traditional aluminum cookware lines throughout the 1950s, producing larger and more diverse aluminum-based products for the growing American market. The company sought the aid of Beach, whose invention of the Mirro-Craft boat translated his earlier designs and expertise in naval architecture, to create a new product targeted to a small group of boating enthusiasts, and that could be mass-produced and sold to amateur boaters and their families across the country. When it was unveiled in 1958, Beach's Mirro-Craft boat was safer, lighter, more resilient, and more affordable than almost all aluminum recreation vessels available in the 1950s, making pleasure boating possible for the first time to many American consumers.

By the late 1950s, Mirro was Wisconsin's largest aluminum boat manufacturer, and by the early 1960s, the Mirro-Craft was the nation's second best-selling aluminum recreational boat and the best-selling aluminum pleasure boat manufactured in Wisconsin. Although production of Mirro-Craft was transferred to another facility in 1962, the years of initial design development, product testing and refinement, and marketing that occurred during the late 1950s and early 1960s at Mirro Plant #3 were key to the Mirro-Craft's enormous success in Wisconsin and throughout the country. The success of Beach's Mirro-Craft line during this time heralded enormous post-World War II economic growth for both Manitowoc and Mirro, and capitalized on the nation's growing enthusiasm for outdoor recreation and pleasure boating.

The Mirro Plant #3 in Manitowoc was part of the Aluminum Goods Manufacturing Company, later known as the Mirro Aluminum Company. The company, founded as an aluminum novelty business in the late 1890s, launched its flagship "Mirro" brand of cookware in 1917 and rapidly grew to become the largest manufacturer of aluminum cookware in the world. Mirro produced and sold millions of aluminum pots, pans, mixing bowls, coffee pots, and other kitchen utensils, which became commonplace fixtures in most American homes. The Mirro Company's transition to wartime production saw the introduction of new equipment and manufacturing processes to fabricate large metal components used primarily in aircraft production. The company used this gained experience in the post-World War II period, to diversify its product lines and expand its production into a wide variety of aluminum goods, ranging from building siding and storage sheds to aluminum saucer sleds and lightweight aluminum pleasure boats. The Mirro

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Company served as the cornerstone of Manitowoc's industrial economy and was the city's largest single employer through most of the twentieth century.

The Mirro Plant #3 building was designed by prominent Chicago-based industrial architect William Fred Dolke, Jr (1887-1975). The building originally served as a steel plating facility for Mirro cookware handles. In the post-World War II period, however, the building took on an important new role as a testing ground and production facility for the company's new line of lightweight aluminum pleasure boats known as "Mirro-Craft."

The period of significance for the Mirro Plant #3 is 1957 to 1962, spanning the early design and development of the Mirro-Craft vessel by David Beach to the last year the Mirro-Craft line was produced inside the building. While the period of significance is fairly short, it corresponds to the years when this new consumer product was developed, refined and produced at the Mirro Plant #3.

**History of Manitowoc, Wisconsin**

Permanent white settlement began with lumbermen in 1836. The Manitowoc area steadily increased in population after an initial influx of New Yorkers, New Englanders, and German, Norwegian, and Irish immigrants beginning in 1847. Manitowoc's close proximity to the larger settlement of Two Rivers to its north along with its links to eastern markets via its natural harbor along Lake Michigan soon made it a destination for trade and industry. Named the Manitowoc County seat in 1853, Manitowoc was an early port of call for merchant steamers, transporting goods to and from other ports along the shores of the Great Lakes. A strong inland lumber industry fed Manitowoc's large riverside shipbuilding facilities which flourished throughout the nineteenth and early twentieth centuries, producing thousands of schooners and clippers, giving the city its moniker "Clipper City." Between 1850 and 1895, the city's population multiplied twelve-fold and as the Manitowoc County seat, Manitowoc served as both the area's commercial and political hub.<sup>1</sup>

Despite several attempts throughout the nineteenth century to connect the city by rail to the rest of Wisconsin, Manitowoc remained relatively closed to inland markets until the construction of a terminus of the Wisconsin Central Railroad in Manitowoc in 1895. The new railroad line connected the community to the industrial and port centers of Chicago, Duluth, and Minneapolis, and exponentially increased Manitowoc's industrial capacity. Shipbuilding increased with the establishment in 1902 of the Manitowoc Dry Dock Company (later the Manitowoc Shipbuilding Corporation) which built larger steel commercial vessels and later made World War II submarines. Manitowoc's crowded harbor also became the home of several large grain elevators and malting plants.<sup>2</sup>

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<sup>1</sup> Ralph G. Plumb, "Highlights of Manitowoc," *The Wisconsin Magazine of History*, vol.31, no.4 (June 1948), 412-415.

<sup>2</sup> "Highlights of Manitowoc," 415-416; Wisconsin Historical Society, "Map of the state of Wisconsin showing the Wisconsin Central Railroad and its land grant, 1896," <http://content.wisconsinhistory.org/cdm/singleitem/collection/maps/id/47/rec/1> ed on: 12/12/2013.

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In the 1890s, Manitowoc became the southern anchor for a Wisconsin aluminum manufacturing region that stretched thirty miles north along the shores of Lake Michigan to Kewaunee. Though far from the bauxite deposits that made aluminum production possible – in the late nineteenth and early twentieth centuries, American bauxite was mined almost exclusively in Arkansas – a small group of Wisconsin entrepreneurs established successful aluminum manufacturing businesses in Manitowoc and Two Rivers in the early 1890s, producing primarily inexpensive aluminum novelties like hair combs.

**Early History of the Aluminum Goods Manufacturing Co., or “Mirro” (1909-1940)**

The Aluminum Goods Manufacturing Company (AGM Company), later known as the Mirro Company or simply Mirro, grew to become the world’s largest producer of aluminum cookware, and was among the largest of Wisconsin’s many aluminum product manufacturers for most of the twentieth century. The AGM Company was established in 1909 through the consolidation of three older aluminum concerns: the Manitowoc Aluminum Novelty Company of Manitowoc, the Aluminum Manufacturing Company of Two Rivers, and the New Jersey Aluminum Company of Newark, New Jersey. In its first two decades, the Aluminum Goods Manufacturing Company quickly became one of the Manitowoc’s largest employers, buying up competitors and expanding its product lines to include aluminum utensils, cookware, automobile hub caps for such large manufacturers as Dodge, Studebaker, and Buick, and military mess kits, cooking utensils, and canteens for the armed forces during World War I.

In 1917, the company developed a wildly successful high-quality line of aluminum pots and pans called the “Mirro” line, which was sold directly to retailers. Prior to Mirro, the company had produced aluminum cookware and utensils for wholesale, syndicate, and mail order houses and for distributors such as Sunlight Aluminum Company, Great Northern Manufacturing Company, and The United Aluminum Corporation. The Mirro line was the company’s first brand name cookware, and it was aggressively advertised with full pages ads in the Saturday Evening Post, Ladies Home Journal, McCall’s and other national publications.<sup>3</sup>

By the 1920s, the AGM Company was the largest manufacturer of aluminum cookware in the world, giving Manitowoc the moniker of “Aluminum Center of the World.”<sup>4</sup> To accommodate its successful wholesale aluminum cookware lines, Mirro constructed five large facilities after World War I, including a large new headquarters complex (Plant #2) in 1920 at 1512 Washington Street (expanded in 1929) and a large rolling mill in 1922, and the five-story Mirro Plant #3 in 1929 at 2402 Franklin. Additional Mirro production facilities were located in nearby Two Rivers.

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<sup>3</sup> “Sixty Years of Progress,” Mixing Bowl (July 1955).

<sup>4</sup> “City is known as aluminum center – world,” The Manitowoc Herald-News (May 21, 1930), 6.

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**Mirro's Wartime and Postwar Growth (1941-1960)**

The invention of the Mirro-Craft pleasure boat had its roots in the production changes the company made in World War II. As it did during the First World War, during World War II the Mirro Company changed its output to defense products and adapted Mirro facilities for their production. With access to industrial aluminum severely limited during the war, nearly all aluminum production was diverted from civilian to military uses from 1941 to 1945. Mirro facilities, including Plant #3, switched from manufacturing the company's staple consumer cookware lines to simpler military cookware including coffee filters, meat platters, syrup pitchers, meat cans, and canteens. In February 1941, the Chicago Daily Tribune reported that Mirro secured a \$368,000 government contract to produce utensils for the armed forces.<sup>5</sup>

Mirro's wartime workers were also tasked with creating more complex goods. Although the company had focused almost exclusively on the production of small cookware and utensils, Mirro's executives and engineers adapted new technology in order to expand their product lines for wartime production. This included large-scale rolling processes used to produce large sheets of metal. The company began producing 20 mm and 37 mm ammunition cartridge cases, in addition to larger parts for machines of war overseas. The company also received contracts for the manufacture of airplane fuel tanks, engine, radar, and landing gear parts. Company advertisements during the war boasted that the Mirro plants in Manitowoc and Two Rivers were also "busily engaged in the manufacture of various parts for the giant [Boeing] Superfortress [aircraft], including propeller anti-icer tanks, oil shells, hopper tubes, engine deflectors and duct assemblies."<sup>6</sup> Mirro also rolled aluminum in larger quantities for the Lend-Lease program.<sup>7</sup> Mirro would later repeat the large-scale rolling processes the company learned in wartime to produce larger sheets of aluminum and larger and more complex aluminum products during its mid-1950s product expansion.

After the war, the company resumed production of its pre-war civilian products and again became the nation's largest manufacturer of aluminum cookware with innovative products like the popular Mirro-Matic Pressure Pan and the Mirro-Matic Electric Percolator, both of which sold in the millions. Plans for growth in the early 1950s were stalled, however, due to aluminum production restrictions during the United States' involvement in the Korean War (1950-1953) and by the growth of aluminum cookware competitors like West Bend Aluminum.

The mid-1950s saw Mirro's expansion into new markets in the search for new customers among America's growing working and middle class. Plans for a large new aluminum rolling mill for Manitowoc beginning in the mid-1950s spurred the company to develop new lines of non-cookware products to justify this enormous capital investment. In the late 1950s, the company initiated a transformation of its traditional image, beginning with the official change of the company name to "Mirro" after its successful cookware line ("Mirro" had already been the company's unofficial name for several years). The company released a

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<sup>5</sup> "Millions Spent for Army-Navy Aluminum Ware," Chicago Daily Tribune (Feb. 26, 1941), 3.

<sup>6</sup> Undated advertisement, on file at Manitowoc Historical Society.

<sup>7</sup> "Sixty Years of Progress."

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series of new products, “the key to new markets,” it was reported, “geared to an expanding company operation.”<sup>8</sup> The company declared in the Manitowoc Herald-Times that “advanced planning and flexible programs designed to upgrade company research, production and distribution will help to build and maintain ready acceptance for Mirro products in the vast and diversified markets of the sixties.”<sup>9</sup> A new Mirro Builder Sales Department unveiled new Mirro-Plate aluminum siding and the Mirro portable utility house to exploit America’s housing boom. Mirro-Foil and Mirro Jet-Stream cookware were developed to appeal to new American homemakers. Mirro also unveiled new lines of giftware, toys, snow shovels, and the Mirro Sno-Coaster.<sup>10</sup>

In the 1950s, attracted by the purchase potential of the nation’s growing middle class and looking to expand into new markets, Mirro executives and designers embarked on a long-range expansion program to double the company’s output of aluminum and reach annual sales of \$100 million.<sup>11</sup> In order to do this, the company developed over two hundred new products. The company had already had great success with its new recreational products, most notably the Sno-Coaster, introduced in 1957, and the Mirro-Craft pleasure boat, which debuted at the 1958 Chicago Boat Show and was first manufactured in the Mirro Plant #3.

An article in the December 2, 1959 edition of the Manitowoc Herald-Times reported that “Mirro will go into new fields with a high sales volume potential. These include aluminum siding and roofing for residential construction, aluminum foil for household use, disposable foil dishes, containers for bakeries and food packers, food wraps and laminates and expansions of gifts and toys.”<sup>12</sup>

**David D. Beach and the Development of Mirro’s All-Aluminum Boat**

In the late-1950s, the Mirro Company contracted naval architect David Duncan (“Dave”) Beach, Jr. (1918-2009), a highly experienced naval architect well-known among boating design enthusiasts, to develop a small, all-aluminum pleasure boat that could be marketed to both expert and amateur boaters alike.<sup>13</sup> In the mid-1950s, Mirro executives had concluded “after studying the trend to family boating” that a personal recreation boat product that was attractive and easy to use and maintain could appeal to millions of American consumers and help Mirro take control of part of what would soon become a \$2.5 billion recreational boating market.<sup>14</sup> After the production of wartime materiel during World War II, Mirro’s

<sup>8</sup> “Ad – New Products,” Manitowoc Herald-Times (May 16, 1957), T-1; Phone interviews with John Singer, December 10 and 13, 2013.

<sup>9</sup> “Ad – New Products,” Manitowoc Herald-Times (May 16, 1957), T-1.

<sup>10</sup> “Ad – New Products,” Manitowoc Herald-Times (May 16, 1957), T-1; Mixing Bowl (July-August 1959), 3.

<sup>11</sup> “Mirro’s Plans on Schedule, Salesman Told,” Manitowoc Herald-Times (December 7, 1959), 2M; “New Rolling Mill Big Step in Mirro Expansion Plan,” Manitowoc Herald-Times (December 2, 1959), M-1.

<sup>12</sup> “New Rolling Mill Big Step in Mirro Expansion Plan,” Manitowoc Herald-Times (December 2, 1959), M-1.

<sup>13</sup> “Obituary – David Beach, Jr.,” Peoria Journal Star (June 28, 2009); Jack Speirs, “Boating ’64,” Popular Mechanics (March 1964), 214.

<sup>14</sup> “Recreational Boating Has 37 Million Addicts,” The Sheboygan Press (April 10, 1963), 23.

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manufacturing facilities were well equipped to roll aluminum sheet from ingot metal in order to produce a new lightweight, affordable, and reliable pleasure boat for the industry's growing market.

Since at least 1950, David Beach had produced his own designs for small runabout boats, a type of small motorboat useful for short trips, usually for four to eight passengers. Runabouts were popular with American postwar boating enthusiasts for their small size, sleek look, and affordability. Beach's runabout designs were marketed through boating magazines like Speed and Spray (for which he was a member of the technical staff). During the 1950s, Beach became a sought after boat designer and design commentator by private companies, magazines, and trade organizations; in addition to designing aluminum boats for Mirro in the 1950s, Beach also designed boats for the Tacoma, Washington-based Douglas Fir Plywood Association, including a 20 foot long cabin cruiser in 1959.<sup>15</sup> With his experience and history of innovative runabout designs, David Beach was Mirro's ideal choice to design the product it hoped would help them enter the lucrative pleasure boating market.<sup>16</sup> Though the exact date of Beach's contract with Mirro is not clear, Beach's design work on Mirro's new boat product was well underway by mid-1957.

Though he appears to have predominantly used wood in his pre-Mirro boat designs, David Beach was drawn to the increasing popularity and accessibility of aluminum. As he explained to a newspaper reporter later in his life, he found aluminum could be very easily maintained, cleaned, and repaired with little effort.<sup>17</sup> Though Mirro specialized in small, simple aluminum cookware products, changes in its facilities and among its executives during World War II had improved the capacity of the country (and the will of its leadership) to produce larger and more complex products. This gave Beach the opportunity to work with a material seen in few waterborne vessels up to that time.

Beach's final design for what would become the "Mirro-Craft" was an inexpensive runabout boat made entirely of rolled aluminum and was ideal for amateur boaters. The runabout was 16 feet long and 6 feet wide with a depth of 34 feet, and constructed of three separate aluminum components: a chine hull, keel, and rear transom large enough to accommodate a 70 horsepower outboard motor. The runabout was assembled by welding the aluminum units together instead of riveting. Beach's rivet-less boat contained fewer opportunities for water infiltration and eliminated the need to monitor deterioration at vulnerable rivet joints, perfect for weekend boaters not keen on constant upkeep. Beach's welded boat was also more resilient in the water and better withstood the battering of waves and, when accidents occurred, other boats. Polystyrene foam was added beneath the boat's plywood floor to aid in flotation. The boat's lightweight aluminum frame weighed a mere 400 pounds, and was light enough to be carried by a few passengers using handles installed along the edge of the boat.<sup>18</sup>

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<sup>15</sup> "1955 Douglas Fir Plywood Fleet Boat Plans Architectmonk" <http://www.worthpoint.com/worthopedia/1955-douglas-fireplywood-fleet-boat-plans>, accessed April 27, 2016; "New Announcements - 20' Cabin Cruiser Plans," Popular Boating (March 1959).

<sup>16</sup> W.L. Fuller, Jr., "Poor Man's Racing Class," Motor Boating (May 1950), 144.

<sup>17</sup> David Beach, "Aluminum Boats Need Very Little Care," Lewiston (Maine) Daily Sun (March 6, 1981), 18.

<sup>18</sup> "Boating Growth Told by Zeckel," Manitowoc Herald-Times (November 4, 1958), M-7; "Mirro-Craft Boats Planned," Manitowoc Herald-Times (January 24, 1958), M-11; "Fiberglass Library - Mirro Craft - 1959 to 1961 Mirro Craft outboard models,"



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Beach's new Mirro-Craft's "cockpit" amenities made navigating the boat as easy and enjoyable as driving an automobile with touches of "automobile styling" including glass windshields, metal steering wheels, a stern light, glove compartments, and even convertible canvas tops and curtains; all features one can find on pleasure boats today. Beach's first Mirro-Craft boat's aluminum hull was left with a natural metallic finish; a later Deluxe Mirro-Craft model offered in 1959 was painted with bold tones of red and white.<sup>19</sup>

**The Mirro-Craft Runabout**

David Beach's innovative boat design was the Mirro Company's most successful and best-known new product of the late 1950s, and was "an important forward step to establish [Mirro's] long-range growth pattern." In January 1958, Mirro president W.F. Bugenhagen announced to the Manitowoc Herald-Times that the company would begin production of a new line of 16 foot aluminum pleasure boats called the "Mirro-Craft." The Mirro-Craft was unveiled to the public on February 7<sup>th</sup>, 1958 at the annual Chicago National Boat Show, and was made available for purchase in retailers across the country during the 1959 boating season.<sup>20</sup>

Beach's introductory model, which was in development by 1957, combined his expertise in boat design along with the manufacturing resources available at Mirro to invent a lighter, safer, and more affordable pleasure boat available to the average consumer. The design featured a "wider and higher chine" than most boats of its type, providing a "'soft ride' free of spray and throwing tendencies."<sup>21</sup> Three transverse seats could easily accommodate four to six people with additional space for storage. In 1958, the Mirro-Craft was also selected by Evinrude Motors in Milwaukee (the company that pioneered and patented the outboard motor) for testing and publicity of their 1959 line of outboard motors. The Mirro-Craft Runabout was featured in Evinrude commercials, marketing publications and instructional materials. An article in the Mixing Bowl, the Mirro Company newsletter, reported that Evinrude engineers had claimed the Mirro-Craft "outclassed" many of the other 30 aluminum boats that the company had tested that year, rating among the best.<sup>22</sup> The boat's excellent, lightweight design made it ideal for family boating and water sports.<sup>23</sup>

The boat's sturdy frame best displayed its technological advantage when an employee-navigated Mirro-Craft not only won first place at the popular WinnebagoLand Outboard Marathon in 1959, but was the only

[http://www.fiberglassics.com/library/Mirro\\_Craft](http://www.fiberglassics.com/library/Mirro_Craft); "Fiberglassics Library – Mirro Craft – 1960 Mirro Craft brochure,"

[http://www.fiberglassics.com/library/Mirro\\_Craft](http://www.fiberglassics.com/library/Mirro_Craft); Joseph E. Choate, "Recreational Boating: The Nation's Family Sport," Annals of the American Academy of Political and Social Science, vol. 313 (September 1957), 112.

<sup>19</sup> "Boating Growth Told by Zeckel," Manitowoc Herald-Times; "Mirro-Craft Boats Planned," Manitowoc Herald-Times; "Fiberglassics Library – Mirro Craft - 1959 to 1961 Mirro Craft outboard models;" "Fiberglassics Library – Mirro Craft – 1960 Mirro Craft brochure;" Joseph E. Choate, "Recreational Boating: The Nation's Family Sport," 112.

<sup>20</sup> "First MIRRO-Craft Shipped Outside of State," Mixing Bowl, July-August 1958.

<sup>21</sup> Mixing Bowl, December 1957.

<sup>22</sup> "First MIRRO-Craft Shipped Outside of State," Mixing Bowl, July-August 1958.

<sup>23</sup> "First MIRRO-Craft Shipped Outside of State," Mixing Bowl, July-August 1958.

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boat in its class to remain intact in rough waters. “Boats built of fibre glass and other materials came in with broken transoms, split seams and stoved-in-bottoms,” it was reported in Mixing Bowl:

“The race proved a real proving ground for the manufacturers of boats... prov[ing] that the Mirro-Craft is well designed and built to withstand the roughest weather that the ordinary family boater would ever be exposed to. It was proof enough that the solid welded hull... can withstand unusual punishment in the heaviest sea. We at Mirro can be justly proud of the Mirro-Craft '16.”<sup>24</sup>

Approximately 100,000 Mirro-Craft runabouts were produced in Mirro Plant #3 between 1958 and 1962 with almost 400 boats a week assembled by a staff of about 30 workers. In Plant #3, the aluminum hull, keel, and transoms were cut from sheets of aluminum and welded together and flotation styrofoam installed. The boat was internally braced and spray painted, and the accessories added. After completion, most of Plant #3's Mirro-Craft boats were transferred to a rail terminal in nearby Plant #2 where they were loaded onto 18 custom freight cars specially-designed with engineered air cushions and delivered to Mirro-Craft distributors across the country. Many small dealers and individual buyers, mostly from Wisconsin and Minnesota, ventured directly to Manitowoc and to Plant #3 to personally take charge of their newly assembled Mirro-Craft boats.<sup>25</sup>

After the Mirro-Craft's successful debut in 1958, Mirro developed several new Mirro-Craft products, adding custom features to its initial design to attract consumers of all recreational persuasions. The “Family Runabout,” first produced in Mirro Plant #3 in 1959, cost consumers approximately \$950 and seated six passengers on two rows of “luxurious upholstered seats... combin[ing] modern styling with many practical features to make it America's truly family-fun boat.” The “Ski 'N' Troll,” produced in Mirro Plant #3 starting in 1960, cost consumers approximately \$995 and included double-sided seats with one side facing backward to facilitate water skiing, diving, and troll fishing. The “Camp 'N' Cruise,” also produced at Mirro Plant #3 starting in 1960 and marketed at approximately \$845, eliminated a second row of seats from the Family Runabout to accommodate sleeping bags for overnight passengers. New 12 and 14 foot “cartop” fishing boat models were produced and sold in 1961.<sup>26</sup>

Mirro became the state of Wisconsin's largest aluminum boat manufacturer and the Mirro-Craft the nation's #2 bestselling aluminum recreational boat.<sup>27</sup> Soon rivaling the Star Metal Boat Company as the country's top producer of aluminum boats, the Mirro-Craft was showcased in MotorBoating magazine in January 1960's “take home boat show” issue as one of the country's most popular outboard vessels. Mirro proudly exhibited its new hometown water craft in retail stores across the Manitowoc-Two Rivers area and

<sup>24</sup> Mixing Bowl, vol.21, no.2 (1959), 3.

<sup>25</sup> Mixing Bowl (February-March 1960), 3-5. Mixing Bowl (May 1959), 6-7. Phone interview with John Singer, December 13, 2013.

<sup>26</sup> “Fiberglass Library – Mirro Craft - 1959 to 1961 Mirro Craft outboard models;” “Fiberglass Library – Mirro Craft – 1960 Mirro Craft brochure;” “Ad – New for 1961,” Manitowoc Herald-Times (February 16, 1961), 2-M.

<sup>27</sup> Phone interview with Robert Jagemann, December 10, 2013.

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at marine shows across the country, boosting Mirro sales for the 1950s and early 1960s. The excitement for the Mirro-Craft line within the Mirro Company itself was reflected in several newspaper articles and by large illustrated spreads in its own company newsletter, Mixing Bowl. The newsletter offered employee discounts on their own personal Mirro-Craft purchases and profiled workers riding in their own personal Mirro-produced craft. Mirro employees raced the Mirro-Craft in boating competitions and local marine showcases and even rode the boat in local parades including a “grand show” at Manitowoc’s 125<sup>th</sup> anniversary celebration in 1961 where the Mirro-Craft was displayed as a “symbol of progress.”<sup>28</sup>

### **The Mirro-Craft and Post-World War II Wisconsin Boating Culture**

In producing the Mirro-Craft, Mirro sought to modernize its image and looked to the recreational activities of residents of Wisconsin and other states across the nation for inspiration. With boating one of the fastest growing industries in America, the late 1950s was an opportune time for Mirro to enter the business of selling small recreational craft. With an estimated three million recreational boaters in 1957 alone and \$2.25 billion dollars in expected boat sales in 1958 (11% higher than the year before) Mirro-Craft’s sales division saw the potential for a massive sporting product windfall. With an estimated 45% of outboard boats sold to customers in the Great Lakes states of Minnesota, Wisconsin, Iowa, Michigan, Indiana, and Ohio alone, Mirro-Craft officials believed in their own “definite advantage over the competition” with their superior product and proximity to their prime market.<sup>29</sup>

The rise in organized outdoor recreation after World War II extended to recreation along the nation’s waterways, particularly in Wisconsin. With post-war Americans enjoying higher wages and more leisure time than the previous generation, their renewed enthusiasm for outdoor recreation found expression in increased sporting along lakes, rivers, and streams. Fishing, camping, waterskiing, canoeing, and pleasure boating increased and improvements to recreational waterways and to recreation technology including advances in boat construction, engines, steering, and automobile trailers made accessing and enjoying water sports easier and more affordable. The numbers of American pleasure craft swelled from less than 2.5 million in 1947 to 5.25 million in 1955, making pleasure boating one of the nation’s newest favorite pastimes.<sup>30</sup>

The American Midwest, dubbed the “pleasure boating center” of the United States in 1965 after a decade-long period of unparalleled industry growth, represented a large portion of the nation’s recreational boat sales. Wisconsin in particular became one of the most attractive mid-century boating markets in the country, with boat owners in 1961 numbering over 200,000. Boating Wisconsinites soon demanded from their state and local governments the improvement of local waterways, more boat mooring and storage

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<sup>28</sup> Cover, MotorBoating (January 1961); “1961 Outboard Boats,” MotorBoating (January 1961), 147; Mirro Mixing Bowl, vol.21, no.2 (1959); Mirro Mixing Bowl, vol.21, no.4 (1959); “Manitowoc Celebrates Its 125<sup>th</sup> Birthday with a Grand Show,” Manitowoc Herald-Times (July 31, 1961), 10-M.

<sup>29</sup> “Boating Growth Told by Zeckel,” Manitowoc Herald-Times.

<sup>30</sup> Joseph E. Choate, Smooth Sailing Ahead, vol.3, no.8 (May 1955), 44.

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facilities, more launching ramps, more shoreline camping, parking, and restroom facilities. Boating magazines, boat races, and boat shows kept Wisconsin boaters informed of the latest in water craft products and helped sustain a vibrant boating consumer market that remains strong today.<sup>31</sup>

Increased fishing, water skiing, and pleasure boating was accommodated by the production and sale of new kinds of personal water craft. Sporting experts estimated that half-a-million Americans owned personal sailboats and four million owned outboard motor boats like those made by Mirro-Craft in the late 1950s and early 1960s. By the early 1960s, the recreational boat industry reported \$2.5 billion in annual sales generated by mostly working class boating enthusiasts. The most popular personal pleasure craft of the 1950s, the small 10 to 20 foot-long runabout, easily transportable on car-hitched trailers, light and fast with an outboard motor, was marketed by dozens of American companies and constructed out of a variety of materials: wood, plywood, fiberglass, and, the newest material in boat manufacturing, aluminum. In Wisconsin, 93% of all registered boats in 1961 were small outboard motor craft like runabouts.<sup>32</sup>

The boom in recreational boating forced builders to consider the use of new materials and techniques for mass production in order to meet the quickly growing demand. Naval architect and Mirro-Craft designer David Beach was a leader among a new generation of boat designers exploring the use of wood, plywood, and aluminum in their new mass-produced watercraft products. Experimentation continued with the use of aluminum in small pleasure boat construction came soon after World War II due to the increased availability of aircraft material and newly developed wartime manufacturing methods. Reinforced fiberglass plastic and molded plywood were two other methods introduced into the market as low-maintenance, light-weight, and affordable alternatives. The development of a dependable push button starter and steering wheel control for outbound motors, allowed these small watercraft to be even lighter, more economical, and family friendly.<sup>33</sup> Mirro was among the first companies to utilize these new advances in technologies including rolled aluminum metal along with a welded hull and Styrofoam to produce a safer, faster, and more affordable pleasure boat to meet the needs of the growing industry.

Other well-known lightweight metal boat manufacturers in the 1950s and 1960s included Harwill, Inc. of St. Charles, Michigan, manufacturer of the "AeroCraft;" the Southwest Manufacturing company of Little Rock, Arkansas, manufacturer of the "Arkansas Traveler;" the Flour City Ornamental Iron Co. of Minneapolis, Minnesota, manufacturer of the "Aluma Craft;" and the Mirro-Craft's primary competitor, the Star Metal Boat Company based in Goshen, Indiana, manufacturer of the "Star Boat" and "Starcraft." Starcraft and Mirro-Craft, the two largest manufacturers of aluminum boats in the mid-century, are both still in production.<sup>34</sup>

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<sup>31</sup> Department of Resource Development – State of Wisconsin, Pleasure Boating in Wisconsin (July 1961), 1-3.

<sup>32</sup> "Recreational Boating: The Nation's Family Sport," 109-112.

<sup>33</sup> "Recreational Boating: The Nation's Family Sport," 111.

<sup>34</sup> "Builders Change Models, Add to Lines," Chicago Daily Tribune (February 8, 1957), A11; "Boatmakers' Market Runs at High Tide," Chicago Daily Tribune (September 27, 1959), A9; Pleasure Boating in Wisconsin, 3.

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**Mirro and Mirro-Craft After 1962**

In 1962, the Mirro-Craft production facility in Manitowoc's Plant #3 was moved to the Mirro Company's 1922 rolling mill. At the same time, Mirro-Craft moved its production focus to its fishing boats and soon discontinued the Mirro-Craft runabout models. The departure of the Mirro-Craft production line from Plant #3 also signaled a change in the Mirro-Craft's construction method. After 1962, instead of fully welding all of the Mirro-Craft seams, Mirro assembled its boats using metal rivets, following more conventional and inexpensive industry standards. The Mirro-Craft boat line was purchased by former Mirro employees in 1982 and production was moved to Gillett, Wisconsin. Production of Mirro-Craft brand boats continues today under Northport Corp. of St. Cloud.<sup>35</sup>

The Mirro Company was purchased by the Illinois-based Newell Companies in 1983. By 2003, all Mirro company production operations were transferred out of Manitowoc and overseas. All of Mirro's original Manitowoc facilities are either demolished or vacant and slated for demolition except for Plant #3.

**History of the Mirro Plant #3**

The Mirro Plant #3, completed in 1929, is the only building that survives from the Mirro Company's period of rapid growth and expansion during the early decades of the twentieth century.

The Mirro Plant #3 was constructed eight blocks west of the company's main plant (Plant #2) at 1512 Washington Street (completed in 1911 and expanded in 1920 and 1929). Mirro purchased the site of the future Plant #3 in 1928 along with the adjacent Manitowoc Plating Works (demolished in the 1970s) with the intent of creating an independent steel plating facility remote enough from Plant #2 to prevent the intermingling of the company's steel and aluminum industrial processes (contact between steel and aluminum in their raw states can initiate potentially destructive galvanic corrosion).

The Mirro Plant #3 was designed by noted Chicago industrial architect William Fred Dolke, Jr (1887-1975), who also designed the large seven-story addition to Mirro's Plant #2 that was completed in 1929. Dolke received his training in architecture at the Massachusetts Institute of Technology and found his first career success as a designer for the engineering firm Lockwood, Greene & Co., which specialized in industrial designs for buildings across the country. Dolke joined the firm in 1915 and by 1921 had been promoted to chief engineer of the Chicago office. In 1917, he wrote an article on construction of industrial buildings that was featured in The American Architect. In 1928, he formed his own architecture firm in Chicago, focusing on industrial design. His commissions for Mirro Plant #3 and the expansion of Plant #2 were among his first commissions as a solo practitioner.<sup>36</sup>

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<sup>35</sup> Phone interviews with John Singer, December 10 and 13, 2013; "MirroCraft – Overview," <http://www.mirrocraft.com/about-overview/>, accessed December 13, 2013.

<sup>36</sup> American Institute of Architects Archives, Questionnaire for Architects' Roster dated October 17, 1946.

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In 1929, the new Plant #3 was placed into operation as a facility for the plating of steel cookware handles.<sup>37</sup> The Mirro Plant #3 was the last Mirro production building built before the company's 1930s production slowdown. The building continued to be used for steel plating throughout the Great Depression, for defense product production during World War II, and for additional steel part production and metal stamping in the decade after the war.<sup>38</sup>

In 1958, the Mirro Plant #3 became the first production facility for Mirro's new Mirro-Craft line, an inexpensive and lightweight 16-foot welded aluminum runabout pleasure boat intended for consumers joining the rising movement of American recreational boating. The debut of the Mirro-Craft was one of Mirro's highest profile successes of the late 1950s and was part of the company's expansion into more diverse ranges of non-cookware products. In the two years after the successful unveiling of the first Mirro-Craft, Mirro expanded its aluminum boat line with newer models including the Family Runabout, the Ski 'N' Troll, and the Camp 'N' Cruise, customized to meet the needs of different pleasure boat users and all produced in the Mirro Plant #3. Already the nation's largest aluminum cookware manufacturer, in the late 1950s Mirro became the state of Wisconsin's largest aluminum boat manufacturer and the Mirro-Craft the nation's #2 bestselling aluminum recreational boat.<sup>39</sup>

The Mirro-Craft was manufactured within the Mirro Plant #3 until 1962 when production moved to a new facility. After 1962, the company used the Mirro Plant #3 primarily as a warehouse and as leasable tenant space. In 1981, the building was sold to local candy and tobacco distributor Berkedal & Shimek. The Mirro Plant #3 is currently vacant.<sup>40</sup>

**David D. Beach (1918-2009), Designer of the Mirro-Craft**

David ("Dave") Duncan Beach, Jr. (1918-2009) was a well-known twentieth century naval architect called "one of the nation's foremost specialists in small-boat design" by *Popular Mechanics* in 1964.<sup>41</sup> Beach was

<sup>37</sup> "Goods takes over plating works plant," *Manitowoc Herald-News* (August 17, 1928), 2; "Goods Co. gets plans on add to plating wks.," *Manitowoc Herald-News* (March 9, 1929), 2; Wisconsin Historical Society, Wisconsin Architecture and History Inventory, 1512 Washington St, Manitowoc, Manitowoc County", Wisconsin, Reference Number 58811; Wisconsin Historical Society, Wisconsin Architecture and History Inventory, 2402 Franklin St, Manitowoc, Manitowoc County", Wisconsin, Reference Number 57849; "Mixing Bowl 60th Anniversary edition, 1895-1955, and related Mirro Aluminum materials;" Aluminum Manufacturing Company (July 1955); online facsimile, <http://www.wisconsinhistory.org/turningpoints/search.asp?id=1207>, online facsimile, <http://www.wisconsinhistory.org/turningpoints/search.asp?id=1207>; accessed December 11, 2013; Phone interview with John Singer, former Mirro manager, December 10, 2013; Phone interview with Robert Jagemann, building owner, December 10, 2013; Sanborn Fire Insurance Map, 2402 Franklin Street, Manitowoc, Wisconsin. 1964.

<sup>38</sup> Phone interview with John Singer, December 10, 2013; Phone interview with Robert Jagemann, building owner, December 10, 2013.

<sup>39</sup> Phone interview with Robert Jagemann, December 10, 2013.

<sup>40</sup> Wisconsin Historical Society, Wisconsin Architecture and History Inventory, 2402 Franklin St, Manitowoc, Manitowoc County", Wisconsin, Reference Number 57849; Phone interview with Robert Jagemann, December 10, 2013.

<sup>41</sup> "Obituary – David Beach, Jr.," *Peoria Journal Star* (June 28, 2009); Jack Speirs, "Boating '64," *Popular Mechanics*, March 1964, 214.

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born in New Haven, Connecticut in 1918, attended the University of Michigan in Ann Arbor, participating in the university sailing club and graduating from the College of Engineering in 1939.<sup>42</sup> After college, young David Beach moved frequently. Beach relocated to Norfolk, Virginia, a major East Coast naval center, where he married Helen Fisher in 1943.<sup>43</sup> By the following year, David Beach had relocated again to Fort Lauderdale, Florida, where he worked for Charles D. Roach, a nationally-known PT (patrol torpedo) and Army Rescue boat designer during World War II and a yacht designer in the peacetime that followed; Charles D. Roach was a 1938 graduate of the University of Michigan and Beach's fellow Michigan sailing club member.<sup>44</sup> Beach worked with Roach during the war and in the late 1940s gave him a wide range of experience with boat design both for utility and pleasure.

The early 1950s found David Beach living in Maywood, New Jersey and described by the magazine Motor Boating as "a naval architect of quite some distinction," by which time he had begun producing his own designs for small runabout boats. During this decade, Beach became a sought after design commentator for magazines and an independent boat designer by trade organizations and private companies, including Mirro for whom Beach designed the Mirro-Craft, a small family runabout that debuted in 1958 and became the second bestselling aluminum recreation boat in America.<sup>45</sup>

By the early 1960s, Beach joined the Los Angeles-based McCulloch Corporation (today called the McCulloch Motors Corporation) as a marine architect where he designed and patented designs for boats and boat products similar to the Mirro-Craft.<sup>46</sup> By 1963, he was the Naval Architect and Chief Engineer of Brunswick Corporation's Boats Division located in Warsaw, Indiana.<sup>47</sup> Beach relocated shortly thereafter to Chicago where by the late 1960s he was a "noted designer of high speed naval rescue boats" and a manager of yacht engineering for the Boating Industry Association of Chicago.<sup>48</sup> In Chicago, Beach was an instructor for the Chicago Tribune newspaper's annual boat classes on Lake Michigan and an active member of the National Sanitation Foundation, advising on waste disposal aboard pleasure craft.

In his later life, Beach continued working as a well-known expert on and advocate for boating recreation. The Boating Association of Chicago merged with the National Association of Engine and Boat

<sup>42</sup> "Michigan Sailing Club Preparing for Collegiate Competition Next Year," The Michigan Alumnus, vol. 44, no.22 (June 11, 1938), 422, 427.

<sup>43</sup> "Michigan Sailing Club Preparing for Collegiate Competition Next Year," 422; Certificate of Marriage – Commonwealth of Virginia – David Duncan Beach, Jr. and Helen Elizabeth Fisher, July 29<sup>th</sup>, 1943," Ancestry.com, accessed April 27, 2016.

<sup>44</sup> Solly Hall, "Southward Ho!" Motor Boating (September 1945), 68; "The Coral Ridge Yacht Club," Motor Boating (January 1948), 338; "Michigan Sailing Club Preparing for Collegiate Competition Next Year," 422.

<sup>45</sup> W.L. Fuller, Jr., "Poor Man's Racing Class," Motor Boating (May 1950), 144.

<sup>46</sup> David Beach, "A Marine Architect Looks at the Problem," Popular Mechanics (March 1966), 160; Collapsible Top for Boats: United States Patent Office, David D. Beach (Patent #3,051,967, September 4, 1962); Boat Construction: United States Patent Office, David D. Beach (Patent #3,052,896, September 11, 1962); Boat: United States Patent Office, David D. Beach (Patent #195,491, June 18, 1963).

<sup>47</sup> "How to Build Deborah," The Rudder, vol. 79 (February 1963).

<sup>48</sup> "Spotlight on Late News - NSF Waste Standards Complete," Motor Boating (October 1967), 182; "Camper-Bodied Boats Predicted for Future," Spokane Daily Chronicle (August 8, 1967), 19.

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Mirro Aluminum Company Plant #3  
Manitowoc, Manitowoc County, WI

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Manufacturers of New York in 1979, forming the National Marine Manufacturers Association (NMMA).<sup>49</sup> David Beach continued to work for the renamed NMMA as Manager of Engineering Services until he retired in 1995.<sup>50</sup> David Beach died at the age of 91 in Peoria, Illinois in 2009.<sup>51</sup>

**Comparable Sites**

In addition to the Mirro-Craft manufacturing facility at Mirro Plant #3, the only boat manufacturer in Manitowoc active in the 1950s and 1960s was the Burger Boat Company, founded in 1863 and originally located across the Manitowoc River from its current facility at 1811 Spring Street, to which the company moved in 1914. Though the company remains in operation today, none of the Burger Boat Company's early facilities on either side of the Manitowoc River are extant.<sup>52</sup>

**Conclusion**

The Mirro Aluminum Company Plant #3 is locally significant under National Register Criterion A in the area of Invention as the development, testing and first production facility for the Mirro Aluminum Company's popular Mirro-Craft boat. Designed c.1957 by naval architect David Beach and produced in Plant #3 between 1958 and 1962, the Mirro-Craft's automobile styling, innovative rolled metal skin, Styrofoam ballast, and streamlined assembly methods, made it safer, lighter, more resilient, and more affordable than other small pleasure boats of the 1950s, and made the product a key component of the Mirro Company's successful program of expansion and diversification in the postwar period. As the historic production facility of the Mirro-Craft boat, the Mirro Plant #3 continues to tell the story of the Mirro Company's growth after World War II and the innovative contributions made by boat designer David Beach to the company's success and boating culture in Wisconsin.

\_\_\_End of Statement of Significance

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<sup>49</sup> "National Marine Manufacturers Association – About Us," <https://www.nmma.org/about-us>, accessed April 27, 2016.

<sup>50</sup> "PropellerSafety.com – Boating Industry Statements About Propeller Guards," <http://www.propellersafety.com/propeller-guard-statements/>, accessed April 27, 2016; "Obituary – David Beach, Jr.," *Peoria Journal Star* (June 28, 2009).

<sup>51</sup> "Obituary – David Beach, Jr."

<sup>52</sup> Wisconsin Historical Society, Wisconsin Architecture and History Inventory, 1811 Spring St, Manitowoc, Manitowoc County", Wisconsin, Reference Number 58411.



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Manitowoc, Manitowoc County, WI

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Pleasure Boating in Wisconsin.

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\_\_\_End of References

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Manitowoc, Manitowoc County, WI

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     Insert Boundary Descriptions

**Verbal Boundary Description:**

The property is bound on the south by Franklin Street, on the east by South 24<sup>th</sup> Street, on the west by South 25<sup>th</sup> Street, and on the north by the Chicago & NorthWestern rail line.

**Boundary Justification:**

The boundary for the nomination includes all of the land that was historically associated with the Mirro Plant #3.

     End of Boundary Descriptions

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Section Photographs Page 1

Mirro Aluminum Company Plant #3  
Manitowoc, Manitowoc County, WI

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Insert Photo Descriptions

**List of Photos:**

Name of Property: Mirro Aluminum Company Plant #3

City or Vicinity: Manitowoc

County: Manitowoc

State: Wisconsin

Photographer: Emily Ramsey

MacRostie Historic Advisors

53 West Jackson Blvd, Suite 1142

Chicago, IL 60604

Date Photographed: November 2013

Location of Original Data Files: Wisconsin Historical Society, Historic Preservation Division, Madison, WI

Description of Photograph(s) and Number:

WI\_Manitowoc County\_Mirro Aluminum Company Plant #3\_0001

West facade, detail of signage and windows

WI\_Manitowoc County\_Mirro Aluminum Company Plant #3\_0002

South facade, detail of main entrance

WI\_Manitowoc County\_Mirro Aluminum Company Plant #3\_0003

East and north facades, looking southwest

WI\_Manitowoc County\_Mirro Aluminum Company Plant #3\_0004

South and east facades, looking northwest

WI\_Manitowoc County\_Mirro Aluminum Company Plant #3\_0005

South and west facades, looking northeast

WI\_Manitowoc County\_Mirro Aluminum Company Plant #3\_0006

North and west facades, looking southeast

WI\_Manitowoc County\_Mirro Aluminum Company Plant #3\_0007

Typical interior, third floor

WI\_Manitowoc County\_Mirro Aluminum Company Plant #3\_0008

Typical interior, fourth floor

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Manitowoc, Manitowoc County, WI

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WI\_Manitowoc County\_Mirro Aluminum Company Plant #3\_0009  
Window detail from interior, fifth floor

WI\_Manitowoc County\_Mirro Aluminum Company Plant #3\_0010  
Typical interior, fifth floor

WI\_Manitowoc County\_Mirro Aluminum Company Plant #3\_0011  
East stair

WI\_Manitowoc County\_Mirro Aluminum Company Plant #3\_0012  
Typical interior, first floor

WI\_Manitowoc County\_Mirro Aluminum Company Plant #3\_0013  
Main entrance vestibule, first floor

\_\_\_End of Photo Descriptions

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Insert Figures

**List of Figures:**

Figure 1: First Floor Plan

Figure 2: Second Floor Plan

Figure 3: Third Floor Plan

Figure 4: Fourth Floor Plan

Figure 5: Fifth Floor Plan

Figure 6: Sanborn Fire Insurance Map of Mirro Plant #3, 1964

Figure 7: Construction of Mirro Plant #3, 1929 (Manitowoc Historical Society)

Figure 8: Construction of Mirro Plant #3, 1929 (Manitowoc Historical Society)

Figure 9: Construction of Mirro Plant #3, 1929 (Manitowoc Historical Society)

Figure 10: Page from Mirro 1962 Annual Report, outlining the company's diversified line of products post-1955, with Mirro-Craft at the top

Figure 11: Portrait and bio of naval architect and designer of Mirro-Craft's first all-aluminum pleasure boat, David Beach (The Rudder, 1963).

Figure 12: 1960 Mirro-Craft brochure showing Family Runabout, Ski 'N' Troll, and Camp 'N' Cruise models ([www.fiberglassclassics.com](http://www.fiberglassclassics.com))

Figure 13: Mirro-Craft boats ready for delivery outside of Mirro Plant #3's south loading doors (Mixing Bowl, vol. 20, no. 11, 1959)

Figure 14: Mirro-Craft boats during assembly in Mirro Plant #3 (Mixing Bowl, vol. 20, no. 11, 1959)

Figure 15: A Mirro employee steering a Mirro-Craft boat at the 1959 WinnebagoLand Outboard Marathon (Mixing Bowl, vol. 21, no. 4, 1959)

Figure 16: The Mirro-Craft in the Two Rivers Snow Festival parade, 1959 (Mixing Bowl, vol. 21, no. 2, 1959)



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Figure 17: Mirro-Craft 1964 catalog (Mike Belongia, Mirrocraft Boats)

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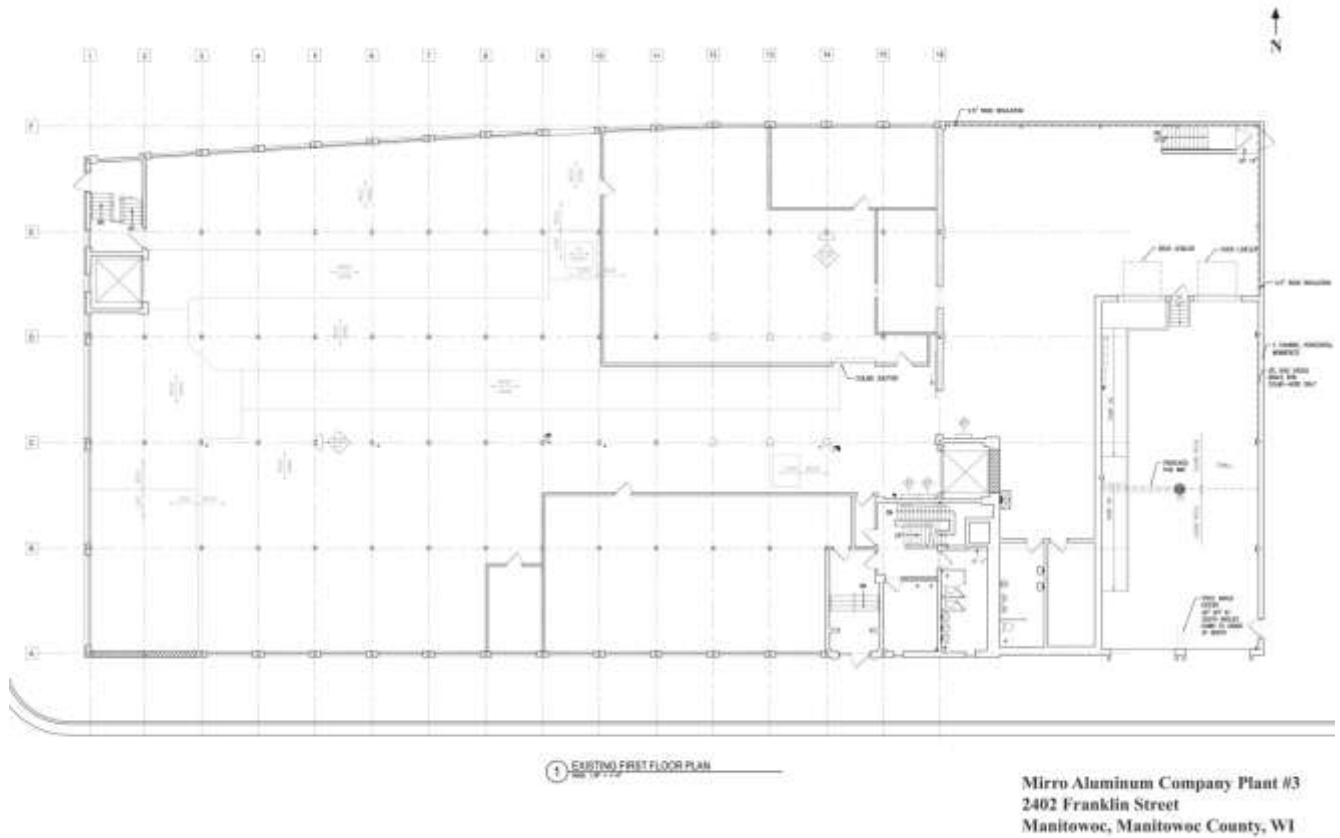


Figure 1: First Floor Plan

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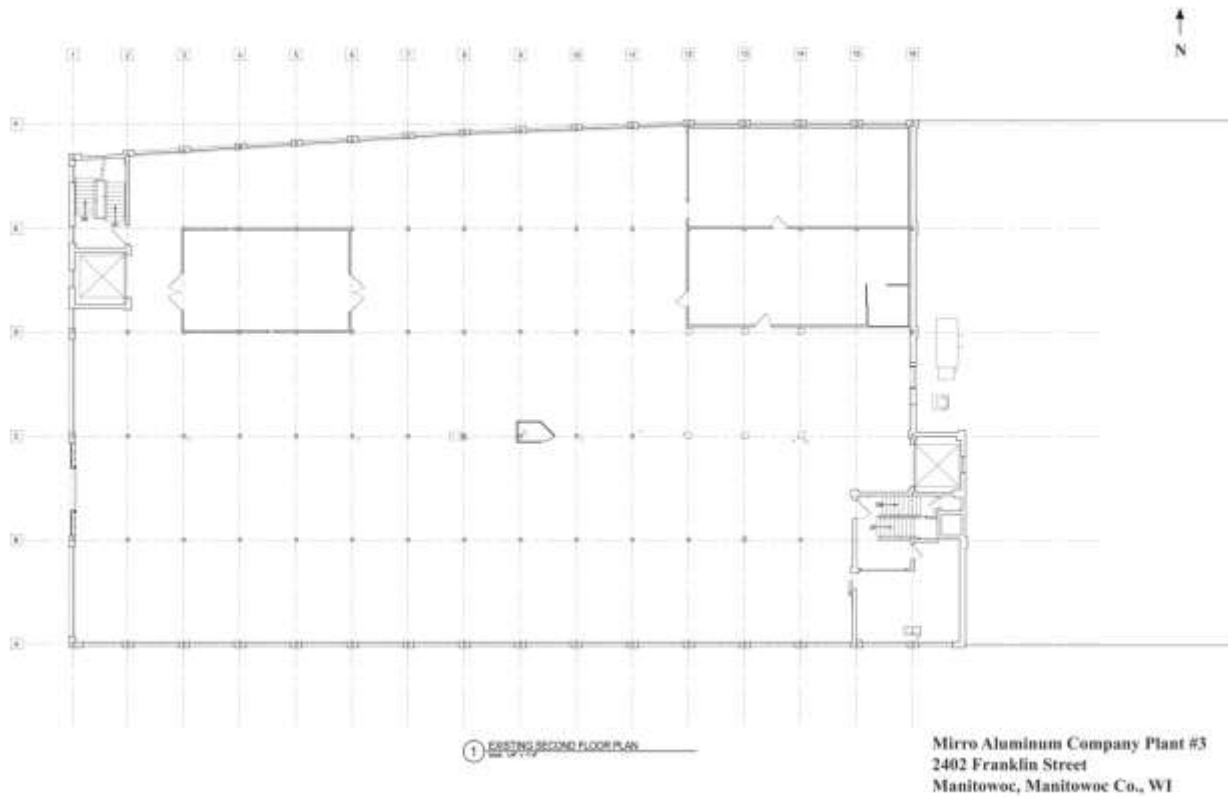


Figure 2: Second Floor Plan

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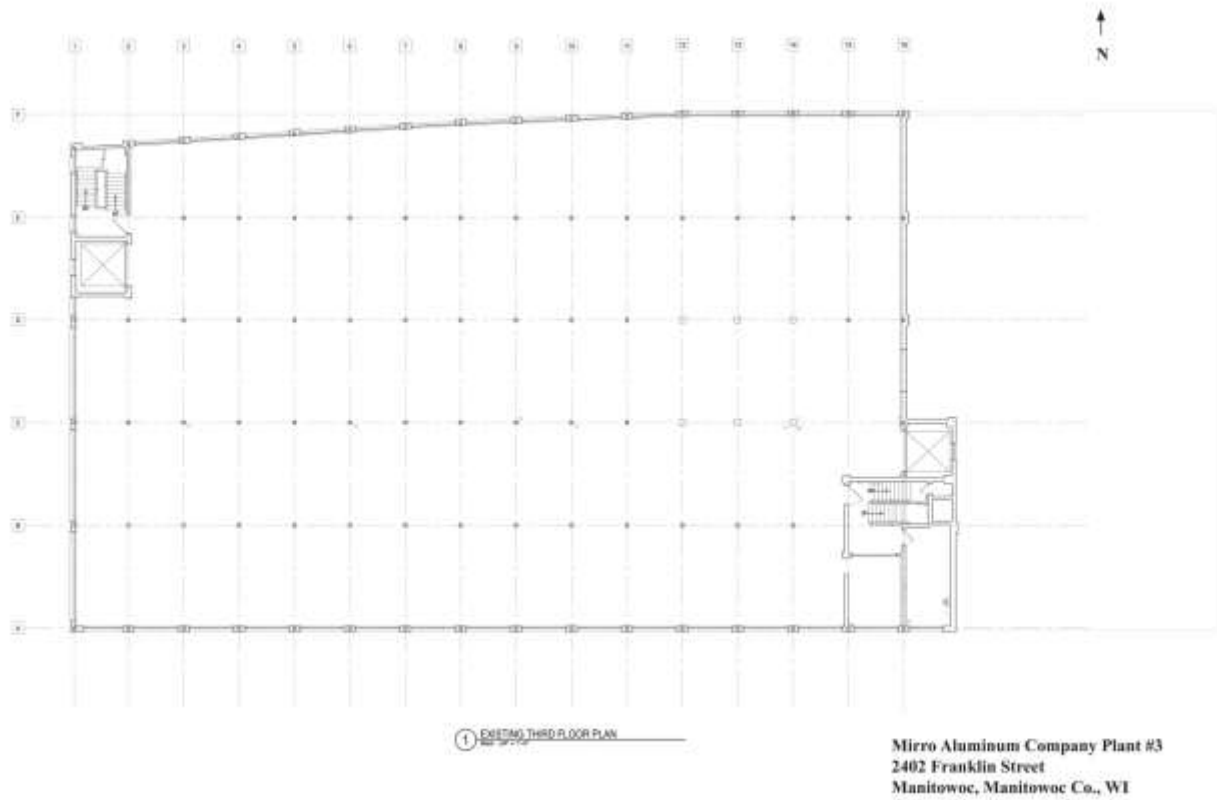


Figure 3: Third Floor Plan

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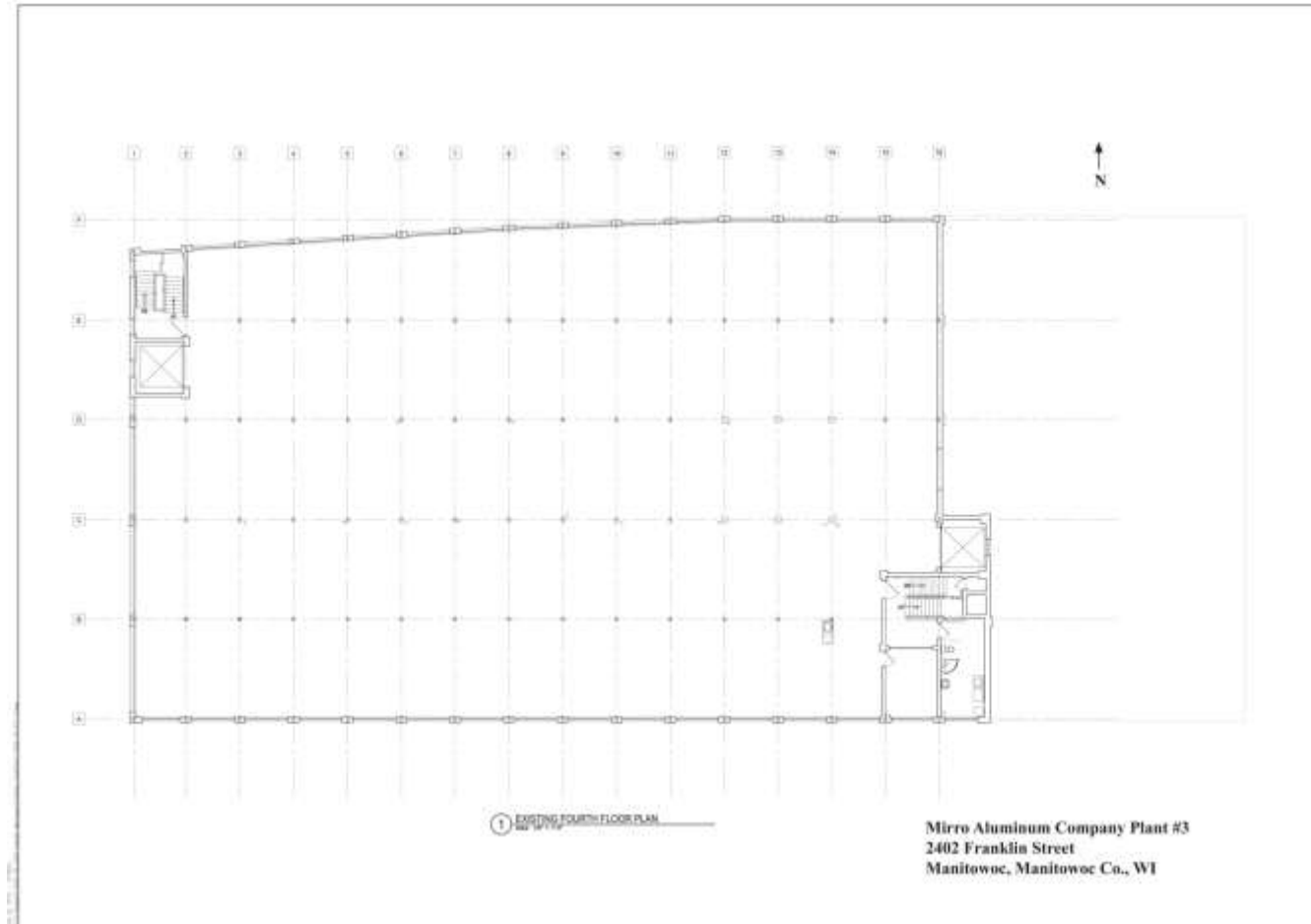


Figure 4: Fourth Floor Plan

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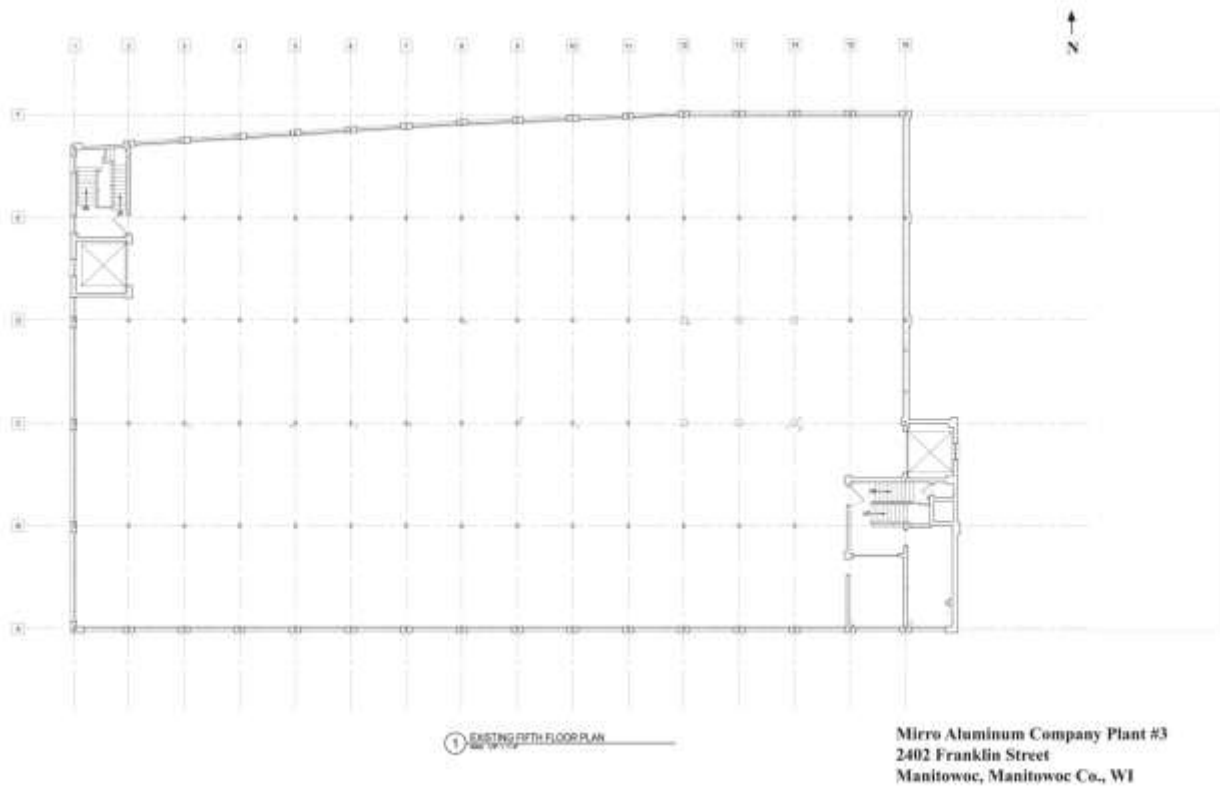


Figure 5: Fifth Floor Plan

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Manitowoc, Manitowoc County, WI

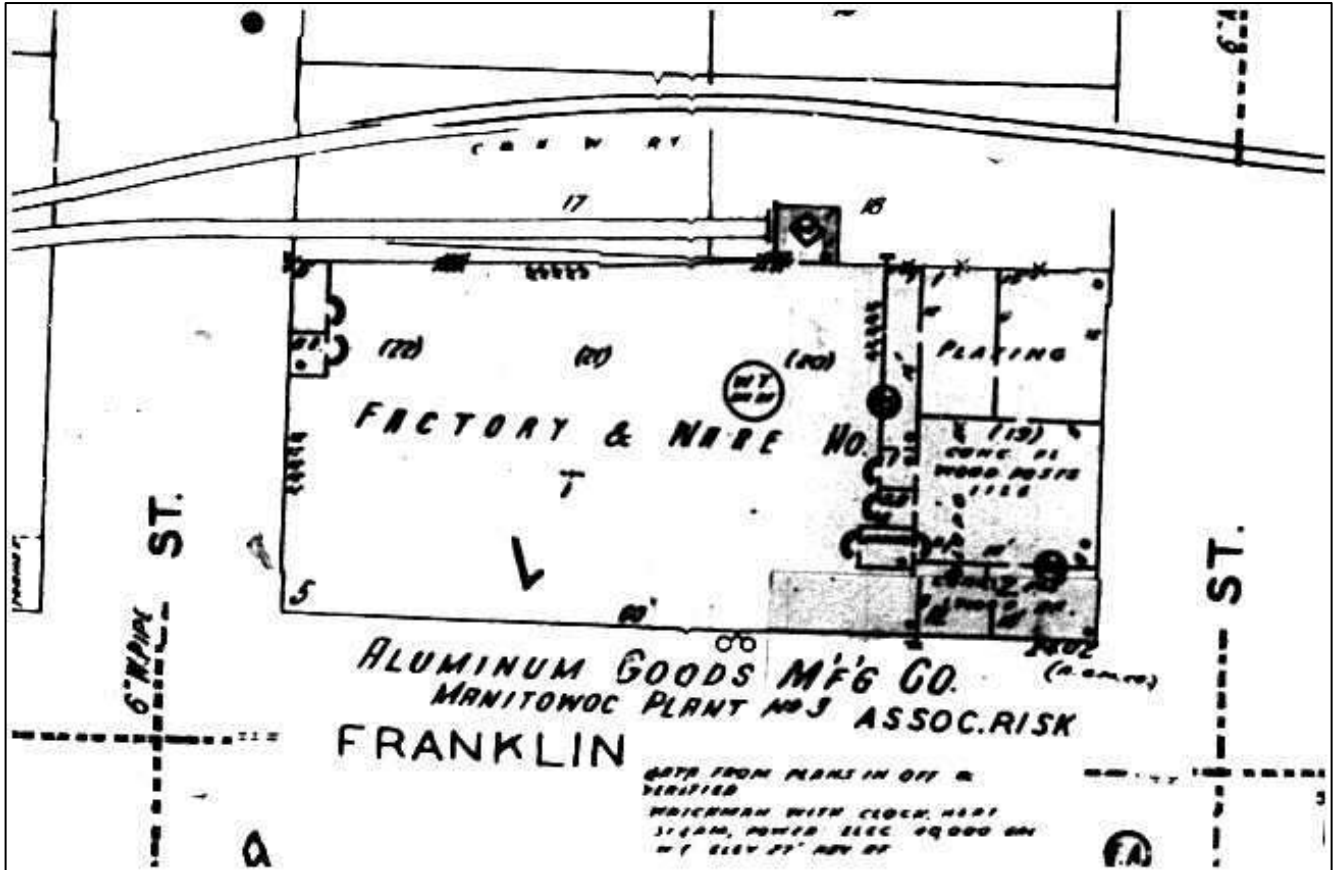


Figure 6: Sanborn Fire Insurance Map of Mirro Plant #3, 1964

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Figure 7: Construction of Mirro Plant #3, 1929 (Manitowoc Historical Society)



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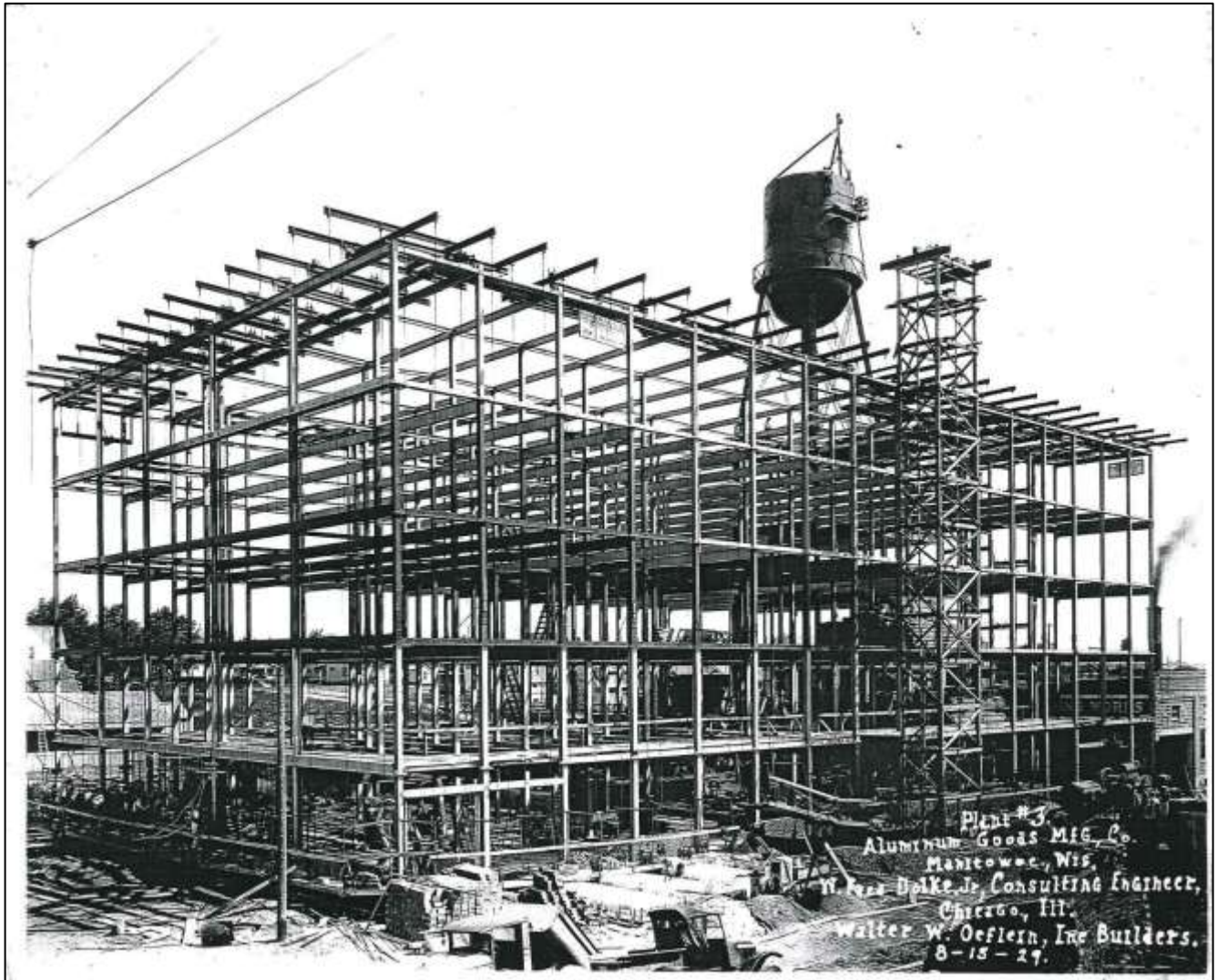


Figure 8: Construction of Mirro Plant #3, 1929 (Manitowoc Historical Society)

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Figure 9: Construction of Mirro Plant #3, 1929 (Manitowoc Historical Society)

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Manitowoc, Manitowoc County, WI

## DIVERSIFICATION

**BOATS**  
Mirro-Craft sales increased in 1962 through the addition of new models, improved structural design and better production facilities.  
With another year of experience in the market, increased leisure time on the part of the consumer, and more money available for recreational activities, the future for Mirro-Craft sales is stimulating.

**CONTRACT STAMPINGS**  
Mirro continued to develop contract sales of stampings and rail formings by improving service to diverse industries through modernization and expansion.  
Our flexible production program permitted us to meet rigid deadlines, with quality, efficiently and competitively.

**FOIL**  
A new display carton for household foil and colorful labels for rigid foilware added impact to Mirro foil at point of purchase. New zip-type apple-white cartons offered greater dealer convenience.  
Sales of private brand household foil expanded. New rigid-foil containers were developed for food processors and sales potentials are most encouraging.

**TOYS**  
With the introduction of simulated electric toys and aluminum foil display cartons throughout the line, toy sales showed good growth. The highest priced units reflected the greatest sales. Toy sales for premium accounts continued to improve and showed promise for notable volume.

**SIDING**  
The sale of aluminum siding, nationally, continues to increase not only in the field of home improvement but also through new construction. This has resulted in many new manufacturers entering the field which has created keener competition.  
Plans are being arranged for new outlets and territories. This, coupled with strong sales effort in the form of field assistance at distributor and dealer levels, should improve our position in this fast growing market. However, we are continuing to explore the market before final plans for fabricating are established.

Figure 10: Page from Mirro 1962 Annual Report, outlining the company's diversified line of products post-1955, with Mirro-Craft at the top

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Figure 11: Portrait and bio of naval architect and designer of Mirro-Craft's first all-aluminum pleasure boat, David Beach (The Rudder, 1963).

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Figure 12: 1960 Mirro-Craft brochure showing Family Runabout, Ski 'N' Troll, and Camp 'N' Cruise models (www.fiberglassics.com)

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Figure 13: Mirro-Craft boats ready for delivery outside of Mirro Plant #3's south loading doors (Mixing Bowl, vol. 20, no. 11, 1959)

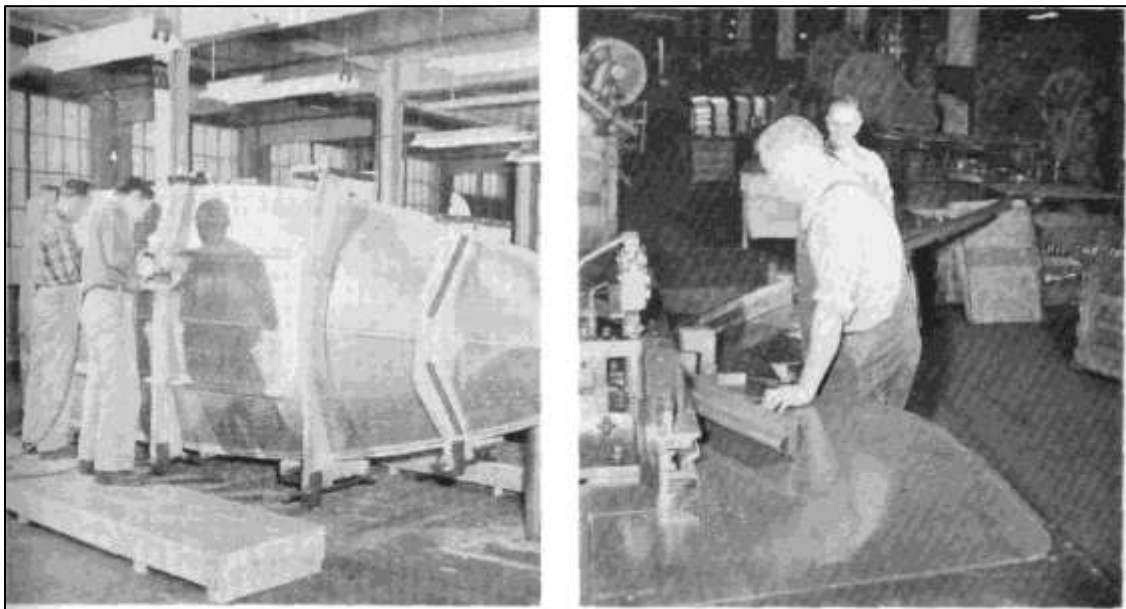


Figure 14: Mirro-Craft boats during assembly in Mirro Plant #3 (Mixing Bowl, vol. 20, no. 11, 1959)

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Figure 15: A Mirro employee steering a Mirro-Craft boat at the 1959 Winnebago Outboard Marathon (Mixing Bowl, vol. 21, no. 4, 1959)

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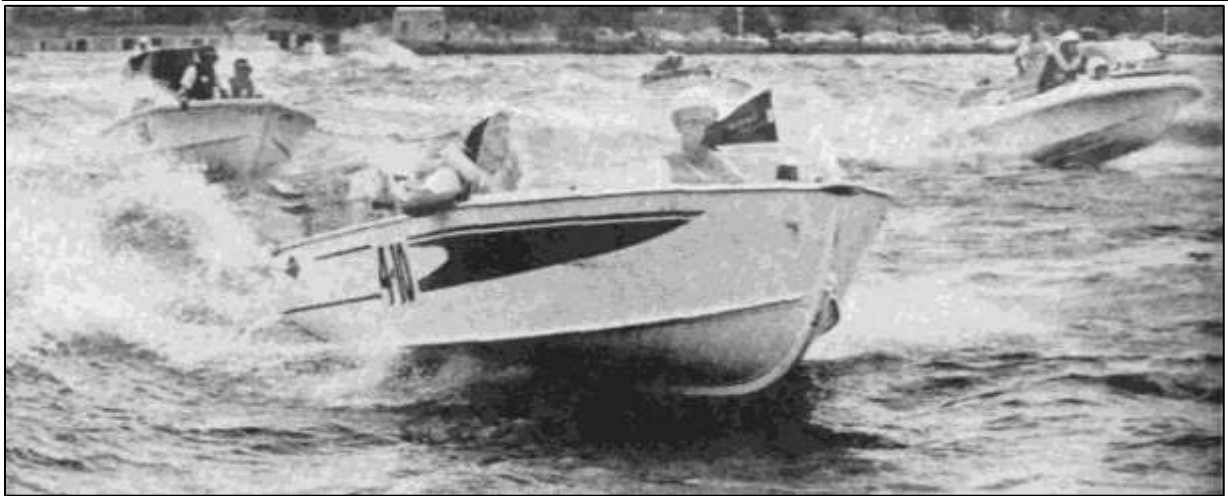


Figure 16: The Mirro-Craft in the Two Rivers Snow Festival parade, 1959 (Mixing Bowl, vol. 21, no. 2, 1959)



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Figure 17: Mirro-Craft 1964 catalog (Mike Belongia, Mirro-Craft Boats)

\_\_\_End Figures

PLANT 3

**SPACE  
AVAILABLE**  
• WAREHOUSE  
• MANUFACTURING  
• OFFICE  
**242.0717**

1929

GALLERY 3

2402

EMERGENCY  
242-0717

GALLERY 3

24

THE 24 HOUR PROJECT  
WEEKLY - SUPPORT THE  
COMMUNITY - SUPPORT THE  
ARTIST

GALLERY 3



Franklin ST  
24th ST



INVINC



PLANT 3

WILSON CO. COOKS MFG. CO.

SPACE  
AVAILABLE  
FOR  
RENT

WILSON



RAILROAD  
CROSSING

RAILROAD  
CROSSING



EXIT

3

EXIT

EXIT















UNITED STATES DEPARTMENT OF THE INTERIOR  
NATIONAL PARK SERVICE

NATIONAL REGISTER OF HISTORIC PLACES  
EVALUATION/RETURN SHEET

REQUESTED ACTION: NOMINATION

PROPERTY NAME: Mirro Aluminum Company Plant No. 3

MULTIPLE NAME:

STATE & COUNTY: WISCONSIN, Manitowoc

DATE RECEIVED: 6/10/16 DATE OF PENDING LIST: 6/27/16  
DATE OF 16TH DAY: 7/12/16 DATE OF 45TH DAY: 7/26/16  
DATE OF WEEKLY LIST:

REFERENCE NUMBER: 16000475

REASONS FOR REVIEW:

APPEAL: N DATA PROBLEM: N LANDSCAPE: N LESS THAN 50 YEARS: N  
OTHER: N PDIL: Y PERIOD: N PROGRAM UNAPPROVED: N  
REQUEST: N SAMPLE: N SLR DRAFT: N NATIONAL: N

COMMENT WAIVER: N

ACCEPT  RETURN  REJECT \_\_\_\_\_ DATE

ABSTRACT/SUMMARY COMMENTS:

The Mirro Aluminum Company Plant #3 is listed in the National Register under Criterion A in the area of Invention. At this facility the popular "Mirro-Craft" line of lightweight family pleasure boats was developed, tested, and produced. The period of significance begins in 1957 with development of the product, and extends to 1962, reflecting the transferal of production to another facility. According to the nomination, "by the late 1950s Mirro was Wisconsin's largest aluminum boat manufacturer, and by the early 1960s, the Mirro-Craft was the nation's second best-selling aluminum recreational boat" (p. 8-1). The plant is considered locally significant.

RECOM./CRITERIA A

REVIEWER Barbara W. [Signature]

DISCIPLINE Historian

TELEPHONE 202-354-2252

DATE 7-26-16

DOCUMENTATION see attached comments Y/N see attached SLR Y/N

If a nomination is returned to the nominating authority, the nomination is no longer under consideration by the NPS.

GLENN GROTHMAN  
6TH DISTRICT, WISCONSIN

COMMITTEE ON EDUCATION AND THE WORKFORCE

COMMITTEE ON THE BUDGET

COMMITTEE ON  
OVERSIGHT AND GOVERNMENT REFORM

JOINT ECONOMIC COMMITTEE



UNITED STATES  
HOUSE OF REPRESENTATIVES

1020 SOUTH MAIN STREET  
SUITE B  
FOND DU LAC, WI 54935  
(920) 907-0624

501 CANNON BUILDING  
WASHINGTON, DC 20515  
(202) 225-2476

GROTHMAN.HOUSE.GOV

May 20, 2016

Wisconsin Historic Preservation Review Board  
c/o Peggy Veregin  
Wisconsin Historical Society  
816 State Street  
Madison, WI 53706

Wisconsin Historic Preservation Review Board:

I am writing in support of the Mirro Aluminum Company Plant #3 nomination to the Wisconsin State Register of Historic Places and the National Register of Historic Places. The building, located in Manitowoc, is part of the Sixth Congressional District which I represent.

The Mirro Aluminum Company Plant #3 is the place where the "Mirro-Craft" line of lightweight aluminum pleasure boats was produced. These boats were designed based on experimentation with new materials, construction techniques, and operational features. Mirro hired naval architect, David Beach, to design these innovative boats with the goal of opening new markets for the company. The Mirro Company sought to take advantage of the popularity of pleasure boating in Wisconsin and elsewhere across the country, and through innovation, expand their manufacturing output. The pleasure boating industry was a growth market and Mirro's line of lightweight, safe and affordable boats eventually became the best-selling aluminum pleasure boat in Wisconsin.

Please give all due and fair consideration consistent with current federal law and agency regulations, keeping me apprised of your efforts and findings by contacting Alan Ott, District Director, at 1020 S. Main Street, Suite B, Fond du Lac, WI 54935 or by calling (920) 907-0624. Thank you for your consideration.

Sincerely,

A handwritten signature in cursive script that reads "Glenn Grothman".

Glenn Grothman  
Member of Congress





WISCONSIN  
HISTORICAL  
SOCIETY

RECEIVED 2280

JUN 10 2016

Nat. Register of Historic Places  
National Park Service

TO: Keeper  
National Register of Historic Places

FROM: Peggy Veregin  
National Register Coordinator

SUBJECT: National Register Nomination

The following materials are submitted on this Sixth day of June 2016, for the nomination of the Mirro Aluminum Company Plant #3 to the National Register of Historic Places:

<u>1</u>	Original National Register of Historic Places Nomination Form
<u>1</u>	CD with NRHP Nomination form PDF
<u>          </u>	Multiple Property Nomination form
<u>13</u>	Photograph(s)
<u>1</u>	CD with image files
<u>1</u>	Map(s)
<u>17</u>	Sketch map(s)/figures(s)/exhibit(s)
<u>1</u>	Piece(s) of correspondence
<u>          </u>	Other:

COMMENTS:

<u>          </u>	Please ensure that this nomination is reviewed
<u>X</u>	This property has been certified under 36 CFR 67
<u>          </u>	The enclosed owner objection(s) do or do not constitute a majority of property owners
<u>          </u>	Other:

Aluminum  
Goods Manufacturing  
Co. Plant #3

Tax project goes  
by this name

