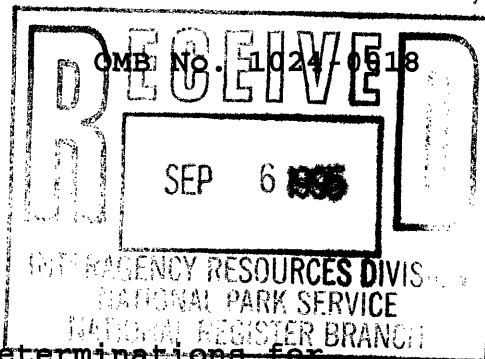


1164

NPS Form 10-900  
(Rev. 10-90)

United States Department of the 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 any 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 F.E. Company Machine Shop

other names/site number AHRS Site No. FAI-445

=====

2. Location

=====

street & number 612 Illinois Street

not for publication n/a

city or town Fairbanks vicinity n/a

state Alaska code AK county Fairbanks North Star code 090

zip code 99701

3. State/Federal Agency Certification

As the designated authority under the National Historic Preservation Act of 1986, as amended, I hereby certify that this X 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 X meets      does not meet the National Register Criteria. I recommend that this property be considered significant      nationally      statewide X locally. (      See continuation sheet for additional comments.)

Judith S. Bellman  
Signature of certifying official

Aug 31, 1995  
Date

Alaska  
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 or other official

\_\_\_\_\_  
Date

\_\_\_\_\_  
State or Federal agency and bureau

4. National Park Service Certification

I, hereby certify that this property is:

entered in the National Register  
     See continuation sheet.

Antoinette Nease

10/12/95

determined eligible for the  
National Register

See continuation sheet.

determined not eligible for the  
National Register

removed from the National Register

other (explain): \_\_\_\_\_

for Signature of Keeper

Date  
of Action

USDI/NPS NRHP Registration Form

F.E. Company Machine Shop  
Fairbanks North Star, Alaska

=====  
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

Contributing	Noncontributing
<u>  1  </u>	<u>      </u> buildings
<u>      </u>	<u>      </u> sites
<u>      </u>	<u>      </u> structures
<u>      </u>	<u>      </u> objects
<u>  1  </u>	<u>  0  </u> Total

Number of contributing resources previously listed in the National Register   n/a  

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

\_\_\_\_\_  
\_\_\_\_\_

USDI/NPS NRHP Registration Form

F.E. Company Machine Shop  
Fairbanks North Star, Alaska

6. Function or Use

Historic Functions (Enter categories from instructions)

Cat: industry/processing/ Sub: manufacturing facility  
extraction processing site  
industrial storage

Current Functions (Enter categories from instructions)

Cat: work in progress Sub: n/a

7. Description

Architectural Classification (Enter categories from instructions)

no style

Materials (Enter categories from instructions)

foundation concrete  
roof metal, asphalt  
walls metal, steel  
other \_\_\_\_\_

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

The F.E. Company Machine Shop is located on the west side of Illinois Street north and across the Chena River from downtown Fairbanks and east of the Alaska Railroad yard. At the time of the shop's construction, Illinois Street was the main road to the gold mining operations north of town. Completion of the Alaska Railroad in 1923 made it possible for large scale mining to profitably operate in the Fairbanks area because of the drop in freight costs and the availability of coal from the Healy area. From 1927, when the shop was constructed, to 1964 when the F.E. Company ceased mining operations in the Fairbanks area, the machine shop was one of the principle buildings that formed the company's central complex. The complex included administrative offices, retort facilities, the machine shop, electrical generating facility, coal storage facility, auto repair facilities, barracks, warehouses, and exterior storage racks. Only the administration building, an auto repair facility, the machine shop, and several warehouses remain. Nearby is company housing.

The machine shop is a steel frame building measuring 104' x 136'. The original 1927 shop measured 64' x 136' and had an east-west orientation. The floor plan was roughly divided into thirds lengthwise. Each third housed a different function. A small office in the northeast corner and large lathes were in the front third. These lathes were belt driven. This suspended system extends through the shop and is powered by an electric motor. The large lathes included a Sidney Lathe (Sidney, Ohio), a LeBlond, an American Electric, and two Drive All Lathes (Detroit, Michigan).

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F.E. Company Machine Shop  
Fairbanks North Star

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The middle third of the building housed the welding shop, wash room and tool room in the north half and an open area for drill presses, metal milling machinery, and horizontal presses. There is a Cincinnati Tool Company drill press, Hendey 24" Gray Shaper (Torrington, Connecticut), No 3 C.H. LeBlond milling machine, Peerless Power Hacksaw Blade (Racine, Wisconsin), and a Southwark Foundry & Machine Co. 10,000 pound horizontal press. This open area forms the leg of an open 'L' shaped floor plan with the area containing the lathes. The tool room has rows of bins holding drills, bits, and dies. The welding shop has equipment and racks of picks, sledge hammers, shovels and other hand tools. The washroom includes lavatories, showers, and lockers. The front and middle thirds of the shop have flooring consisting of 4" x 6" x 1' blocks of tar soaked douglas fir set in the dirt vertically. This gives the floor the effect of tiles and great strength.

The back, or west, third of the original shop has a dirt floor. It housed the blacksmith shop. A wall divides this third from the rest of the shop. Machinery includes an Erie Foundry Company air hammer, a Buffalo Forge Company forge, a Hilles & Jones #3 plate roller, a Hilles & Jones cutter, and a Westinghouse tempering oven.

In 1941, the company built a 40' x 80' addition on the south side. The automotive shop occupied the eastern 48 feet of the addition, and the electrical shop occupied the western 32 feet. This addition has a concrete floor. Work benches with parts bins line each shop's walls. Access to these shops from the original building is through a large sectional overhead door between the automotive shop and main building. A two leaf door connects the automotive and electrical shops.

A second addition to the machine shop is an open storage shed. This shed measures 16' x 64' and is attached to the western end of the original building. It was used for storage of tools and materials used in the blacksmith shop.

The machine shop is one story with a flat roof. For the length of the north third of the shop, the roof height is approximately 16 feet. The remainder of the building has a roof height of approximately 20 feet to provide space for the belt driver and overhead cranes and hoists.

The east elevation is the principle facade. This elevation has paired 6/6 double hung sash windows with paired three light single sash windows placed above the windows in the southern forty feet (the auto repair and electrical shop addition). A large double leafed wood door with nine light windows in each leaf is centrally placed and serves as the main entrance to the building. A personnel door is located on the south end of the elevation. The siding on this elevation, as with the south and north elevations, is galvanized corrugated metal over shiplap. Originally, the east elevation had two overhead garage doors at its norther end. It is believed that they were removed in 1941 when the shop was enlarged.

The south elevation has the auto repair and electrical shops along eighty feet of the building's length. It has a band of 6 light single sash

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F.E. Company Machine Shop  
Fairbanks North Star

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windows forming a clear story. A band of 6/6 double hung sash windows are beneath these for the west half of the elevation. The north half of the elevation has three forty panel section overhead garage doors with the second-from-the-top panels glazed. The western portion of the south elevation is the original shop. It has five paired 6/6 double hung sash windows evenly spaced. The extreme west end of this elevation is the open storage addition.

The south forty feet of the west elevation, the electrical shop addition, has four paired 6 light single sash windows that form a clear story. Beneath are 6/6 double hung sash windows and a forty panel sectional overhead garage door that has the top panels glazed. The northern 64 feet of the south elevation is the open storage addition. A paired nine light single sash window is centrally placed in the elevation's north half. This half is shiplap sided.

The north elevation is not symmetrical. Beginning at the east end, the elevation has a band of eight 6/6 double hung sash windows followed by a double leaf wood door with both leaves having a six light window. This is followed by a personnel door. Centrally located is a band of eleven six light single sash windows with the western four stacked two high. To the west of this band of windows is a paired 6/6 double hung sash window followed by a double leaf wood door with six light windows in each leaf. A paired 6/6 double hung sash window is placed to the right of the double door and a wood ladder marks the west end of the original shop's north elevation. The shed roofed open storage addition has a plain double wood door as its fenestration.

The interior of the original shop retains its 1920s appearance and the additions retain their 1940s appearances. Interior wall surfaces are the original plywood with fir battens, and the machinery is in place and in operating condition. On the exterior, the only change has been installation of galvanized corrugated metal over the original shiplap siding when the additions were constructed. The machine shop provides a window into the state-of-the-art industrial design of the late 1920s.

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.)

- A owned by a religious institution or used for religious purposes.
- B removed from its original location.
- C a birthplace or a 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)

industry  
\_\_\_\_\_  
\_\_\_\_\_

Period of Significance 1927-1964

Significant Dates 1927  
\_\_\_\_\_  
\_\_\_\_\_

Significant Person (Complete if Criterion B is marked above)  
n/a

Cultural Affiliation n/a

Architect/Builder United States Smelting Refining and Mining Company

USDI/NPS NRHP Registration Form

F.E. Company Machine Shop  
Fairbanks North Star

=====  
**Narrative Statement of Significance (Explain the significance of the property on one or more continuation sheets.)**

The machine shop was a critical element of the huge Fairbanks Exploration Company (F.E. Company) gold mining operation in interior Alaska. The F.E. Company was a subsidiary of the United States Smelting Refining and Mining Company (USSR&M) of Boston. The company built the machine shop as part of its central complex in 1927. The company used the shop until it ceased mining operations in the area in 1964. Skilled machinists, electricians, carpenters, mechanics, and blacksmiths worked in the shop, building and repairing equipment and manufacturing parts as needed. The building, with its machinery and tools intact, is an exceptional example of a large industrial building. It was the most modern and extensive machine shop built in interior Alaska up to that time, and was one of the first buildings in the region framed in steel.

Following Felix Pedro's discovery of gold in the area in 1902, more than twenty small mining camps sprang up along creeks within a thirty-mile radius of Fairbanks. Most mines were small, drift mining operations. After the richer, more accessible areas had been mined, activity declined. Gold production in the Fairbanks district fell from \$10.5 million in 1909 to \$3 million in 1915.

With the completion of the Alaska Railroad in 1923 that provided ready access to the Healy coal fields and lowered shipping costs, the USSR&M began acquiring mining claims in the Fairbanks Mining District. They eventually operated eight gold dredges into interior Alaska. In 1926, the company began construction of an office, machine shop and warehouse complex just north of downtown Fairbanks. From what the company called the "townsite" it built and maintained the dredges, oversaw operations, and refined the gold. The site straddled the road to the gold fields and connected by a rail spur to the Alaska Railroad--and thus to an ice free port, a coal supply, and many of the interior gold fields.

Workers at the machine shop built and repaired the electric powered dredges. Skilled machinists, electricians, carpenters, mechanics, and blacksmiths worked in the shop. Working with company architects, engineers, and dredgemasters, they designed equipment to adapt the machinery used in the mining process to the interior's rugged environment. They also manufactured parts needed for the 91-mile long Davidson Ditch the company constructed to move water for cold water thawing, strip mining, dredging, and hydraulic operations in the Fairbanks Mining District.

The F.E. Company was the largest private employer in interior Alaska from the 1920s until 1964. Before World War II, about one-third of the approximately 3,500 people in Fairbanks worked for the company. Mining operations ceased during World War II because gold mining was not considered essential to the war effort. Although mining resumed after the war, the F.E. Company did not dominate the regional economy as it had before the war. It did, however, account for more than half the gold production in Alaska between 1950 and 1965.



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F.E. Company Machine Shop  
Fairbanks North Star, Alaska

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When operations shut down in 1964, the company had mined over \$125 million of gold, most at \$35 an ounce. The company had developed a mineral extraction industry on a scale unprecedented in the region. The machine shop, an integral part of the operation and one of the few remaining buildings at the "townsite," provides a glimpse of the scale and organization of the operation.

USDI/NPS NRHP Registration Form

F.E. Company Machine Shop  
Fairbanks North Star, Alaska

9. Major Bibliographical References

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

American Society of Mechanical Engineers. Gold Dredge #8. National Historic Mechanical Engineering Landmark pamphlet. May 10, 1986.

Beistline, Earl. Personal communication, August 1993.

Boswell, John C. History of Alaskan Operations of United States Smelting, Refining, and Mining Company. Mineral Industries Research Laboratory, University of Alaska Fairbanks, 1979.

Cole, Terrence. Ghosts of the Gold Rush - A Walking Tour of Fairbanks. 2nd edition. Fairbanks: Tanana-Yukon Historical Society, 1987.

Eagen, Pete. Personal communication, August 1992, June 1993, September 1994.

Reckard, Matthew. The F.E. Company Industrial Site: Historic Resources and Preservation Potential. M.S. final report, University of Oregon, Eugene. August 1993.

- Previous documentation on file (NPS) n/a
- 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 acre

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

	Zone	Easting	Northing	Zone	Easting	Northing
1	06	465980	7192180	3	_____	_____
2	_____	_____	_____	4	_____	_____
	_____ See continuation sheet.					

USDI/NPS NRHP Registration Form

F.E. Company Machine Shop  
Fairbanks North Star, Alaska

=====  
Verbal Boundary Description (Describe the boundaries of the property.)

The machine shop occupies the east half of Tract M-2, U.S. Survey 806 (amended), within Section 3, Township 1S, Range 1W, Fairbanks Meridian.

Boundary Justification (Explain why the boundaries were selected.)

The boundary encompasses the original machine shop building and subsequent additions and the unlandscaped land immediately adjacent to the building.

=====  
11. Form Prepared By

name/title John Reeves, Owner

organization \_\_\_\_\_

date June 20, 1995

street & number P.O. Box 81941

telephone 907-457-6058

city or town Fairbanks state AK zip code 99708

=====  
Additional Documentation

Submit the following items with the completed form:

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 the SHPO or FPO.)

name John Reeves

street & number P.O. Box 81941

telephone 907-457-6058

city or town Fairbanks state AK zip code 99708

USDI/NPS NRHP Registration Form

F.E. Company Machine Shop  
Fairbanks North Star, Alaska

NPS Form 10-900-a  
(8-86)

OMB No. 1024-0018

United States Department of the Interior  
National Park Service

NATIONAL REGISTER OF HISTORIC PLACES  
CONTINUATION SHEET

Section photograph identification

1. F.E. Company Machine Shop  
Fairbanks North Star, Alaska  
Pat Petterson (accession number 91-042)  
1926  
Alaska and Polar Regions Department, Elmer E. Rasmuson Library,  
University of Alaska, Fairbanks, AK 99775  
looking west at machine shop under construction
2. F.E. Company Machine Shop  
Fairbanks North Star, Alaska  
Russ Sackett  
June 25, 1995  
Office of History and Archaeology, 3601 C St., #1278, Anchorage, AK  
99503-5921  
looking west at the front (east) elevation of the machine shop
3. F.E. Company Machine Shop  
Fairbanks North Star, Alaska  
Russ Sackett  
June 25, 1995  
Office of History and Archaeology, 3601 C St., #1278, Anchorage, AK  
99503-5921  
looking northeast at the rear of the machine shop; the 1940s additions  
are visible on the left
4. F.E. Company Machine Shop  
Fairbanks North Star, Alaska  
Russ Sackett  
June 25, 1995  
Office of History and Archaeology, 3601 C St., #1278, Anchorage, AK  
99503-5921  
looking northeast at the shed addition on the rear of the machine shop
5. F.E. Company Machine Shop  
Fairbanks North Star, Alaska  
John Reeves  
December 15, 1994  
Office of History and Archaeology, 3601 C St., #1278, Anchorage, AK  
99503-5921  
looking south at the north elevation of the machine shop

USDI/NPS NRHP Registration Form

F.E. Company Machine Shop  
Fairbanks North Star, Alaska

=====  
NPS Form 10-900-a  
(8-86)

=====  
OMB No. 1024-0018

United States Department of the Interior  
National Park Service

NATIONAL REGISTER OF HISTORIC PLACES  
CONTINUATION SHEET

Section photograph identification  
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6. F.E. Company Machine Shop  
Fairbanks North Star, Alaska  
Russ Sackett  
June 25, 1995  
Office of History and Archaeology, 3601 C St., #1278, Anchorage, AK  
99503-5921  
looking at drill presses inside the machine shop
  
7. F.E. Company Machine Shop  
Fairbanks North Star, Alaska  
Russ Sackett  
June 25, 1995  
Office of History and Archaeology, 3601 C St., #1278, Anchorage, AK  
99503-5921  
looking at a milling machine inside the machine shop
  
8. F.E. Company Machine Shop  
Fairbanks North Star, Alaska  
Russ Sackett  
June 25, 1995  
Office of History and Archaeology, 3601 C St., #1278, Anchorage, AK  
99503-5921  
an Erie Foundry Co. hammer inside the machine shop