OMB No. 1024-0018

OCT | 2 2005

# United States Department of the Interior National Park Service

# NATIONAL REGISTER OF HISTORIC PLACES REGISTRATION FORM

PLACES INSTORY 2003
NATIONAL FAMOUS SERVICE

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.

Form 10-900a). Use a typewriter, word processor, or computer, to com-	aplete all items.
1. Name of Property	
historic name Milburn, Frank S., Machine Shop	
other names/site number <u>BE-1479</u>	
2. Location	
street & number 5844 North Orient Street	□ n/a not for publication
city or town_Burlington	□ n/a vicinity
state Kentucky code KY county Boone 0	15 zip code_41005
3. State/Federal Agency Certification	
the National Register Criteria. I recommend that this property be continuation sheet for additional comments.)  Signature of certifying official  David L. Morgan, SHPO  Kentucky Heritage Council/State Historic Preservation Official  State or Federal agency and bureau	orth in 36 CFR Part 60. In my opinion, the property 🖾 meets 🗆 does not meet be considered significant 🗆 nationally 🗅 statewide 🖾 locally. (🗆 See
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:  ———————————————————————————————————	ature of Keeper Date of Action
☐ determined eligible for the  National Register  ☐ See continuation sheet.	) 104 A Booth 112000
determined not eligible for the National Register	son 1/4. 12000 11.25.05
☐ removed from the National Register ——	
□ other (explain):	

5. Classification				
Ownership of Property (Check as many boxes as apply)  x private public-local public-State public-Federal	Category of Property (Check only one box)  ■ x building(s)  □ district □ site □ structure □ object		Resources with previously listed resources  Noncont  1  0  2  0  3	ources in the count)
Name of related multiple proper (Enter "N/A" if property is not part of a m n/a	erty listing nultiple property listing.)	Number of cont National Regist		ces previously listed in the
6. Function or Use				
Historic Functions (Enter categories from instructions) industry/processing/extract industry/processing/extract facility industry/processing/extract facility	ction: manufacturing	Current Function (Enter categories fro Vacant: not in	m instructions)	
7. Description		Materials		
Architectural Classification (Enter categories from instructions)		(Enter categories fro	m instructions)	
no style		Foundation roof walls other	metal concrete b	

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

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Milburn, Frank S., Machine Shop	

#### 7. Statement of Description

Burlington, Boone County, Kentucky

Summary. Set back from, but clearly visible from the street, the Frank S. Milburn Machine Shop (BE-1479) is a one-story edifice of rectangular form and utilitarian design. It is located on the east side of North Orient Street, with the main facade facing west. The building is three bays wide and nine bays deep. The asymmetrical main facade contains a doorway, placed off-center, with single and paired windows on either side. The front gable contains two small, square windows. The walls are unpainted, smooth-surface concrete block and the foundation is concrete. Some cracks are evident in the walls. The walls are pierced by large, industrial-style, multi-light steel windows, which are placed singly or in pairs. The gently pitched, front-gabled roof is covered with raised-seam metal. The actual gabled roofline is largely hidden by a crow-step parapet. A brick chimney rises from the ridgeline. A small, unobtrusive, shed addition was appended to the north side of the building at an unknown date. The Machine Shop is located in a semirural setting on the east side of Burlington, the Boone County seat, two blocks north of the Courthouse Square. Four small outbuildings of functional design can be found on the property: a contributing garage, a noncontributing garage, and two noncontributing sheds. The Machine Shop is presently used for storage. It is in fair condition.

**Interior.** The interior of the building, like the exterior, is plain and unadorned. The walls are cinderblock and the floor is concrete. The ceiling is covered with masonite, which is secured with furring strips. Ceiling-mounted incandescent light fixtures provide illumination.

Most of the interior space is devoted into two large workshops. The front room was used for smaller machine tools and finer production. The back room contained heavier machinery, storage, and a loading dock. Small men's and women's lavatories are located along one wall. Steel I-beam roof trusses are visible. The front of the building is divided into two small rooms. One was formerly used as Milburn's office and the other as a reception area. Both feature acoustical-tile ceilings and resilient tile floors.

Setting. The Frank S. Milburn Machine Shop occupies a discontinuous section of North Orient Street, just south of Park Street. To the south is a small farm with a brick ranch house. To the north is a small frame bungalow. Most surrounding buildings are late-20th-century ranch and split-level residences, interspersed with older bungalows and cottages. At the time of its construction, this property was at the urban limits of

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Burlington. The site is somewhat larger than a typical urban lot, and its placement of buildings seems somewhat more random than conventional for an urban lot.

Four small outbuildings of functional design can be found on the property. At the north end of the property is a front-gabled garage or shed whose walls and roof are covered with corrugated metal siding. It features a garage door and a six-pane fixed window. The side walls are two bays deep. This garage is a noncontributing element of the property because it appears to have been built after the construction of the Machine Shop. Beside it is a smaller, front-gabled frame garage that appears to date from c. 1920-1930 and is a contributing element of the property. The front wall contains double-leaf wood hinged doors. Tarpaper, sections of which are falling away, covers the walls. Behind the Machine Shop are two small, noncontributing sheds, clad in corrugated metal.

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)	Areas of Significance (Enter categories from instructions)
□ A Property is associated with events that have made a significant contribution to the broad patterns of our history.	Invention
■ B x 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.	Period of Significance 1938 to 1955
□ 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.)	Significant Dates
Property is:	
□ A owned by a religious institution or used for religious purposes.	Significant Person
☐ <b>B</b> removed from its original location.	(Complete if Criterion B is marked above)
☐ C a birthplace or a grave.	Milburn, Frank S.
□ D a cemetery.	Cultural Affiliation
☐ 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.	Architect/Builder unknown
Narrative Statement of Significance (Explain the significance of the property on one or more continuation sheets.)	
9. Major Bibliographical References	
Bibliography	NE A SECURE AND A VIOLE
Cite the books, articles, and other sources used in preparing this form on Previous documentation on file (NPS)	one or more continuation sheets.)  □ recorded by Historic American Engineering Record #
□ preliminary determination of individual listing (36 CFR 67) has been requested.	Primary location of additional data
□ previously listed in the National Register □ previously determined eligible by the National Register □ designated a National Historic Landmark	□ x State Historic Preservation Office □ Other State agency
recorded by Historic American Buildings Survey	☐ Federal agency ☐ Local government

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Milburn, Frank S., Machine Shop Burlington, Boone County, Kentucky

## 8. Statement of Significance

Summary. The Frank S. Milburn Machine Shop (BE-1479) meets Criterion B and is significant as a property that is associated with the life of a person significant in America's past. As the place where Milburn conducted his work from 1938 to the 1960s, the machine shop is the local building that best represents Milburn's work as an inventor. In Milburn's own words, "Our entire operation here is devoted to the design and development of new products, machines and solving industrial problems" ("Letter to Mr. Stuart," in Matthew E. Becher, "Frank S. Milburn: Burlington's Cornfield Edison," 2005). In addition to working on his own creations, Milburn also used the machine shop to help amateur inventors develop models of their inventions. He envisioned it as the center of a small complex where visiting inventors and their families could come and stay while a working prototype was being developed. While Milburn's dreams for the facility were never fully realized, he did use it to assist thousands of inventors from the 1940s to the 1960s. One of only two industrial facilities operating in the county in the 1930s, the machine shop also represents the community's largely unrealized dreams for industrial development during the late Depression era. The machine shop has been virtually unaltered on the exterior since its construction. It looks almost as it did upon construction apart from a minor addition to a nonprimary facade. Its setting retains a semi-rural character, and includes a historic outbuildings. Therefore the property retains a high degree of integrity under all its aspects. The property's period of significance is 1938 to 1955.

Frank S. Milburn. Dubbed the "Cornfield Edison" by Mechanix Illustrated, Frank Sinton Milburn (1910-1984) was a highly talented inventor, machinist and tinkerer. He was a die-maker, tool designer, welder, watchmaker and pattern maker. In partnership with Henry Jenisch, Milburn owned and operated a die-casting plant in Paoli, Indiana, called the Jayemm Company. He also manufactured lathes, dies and other metal articles in his Milburn Products Company in Osgood, Indiana, which was founded in 1934 (Becher). Milburn was a technical consultant for about seventy companies in nine states in different manufacturing and industrial fields, but preferred to be called "cornfield engineer" (ibid.). His motto was, "I can improve it with a few slight modifications." He was so well known for this that his friends joked that his initials, "FSM," stood for "Few Slight Modifications" (Matthew E. Becher, personal communication).

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Milburn is best known, however, as "an inventor for inventors." His greatest contribution to invention may be his lifelong passion for assisting other inventors to achieve their dreams. "He dedicated his life to helping the 'little guy' develop ideas into reality" (ibid). During the 1940s and 1950s, Milburn and his associate Henry Jenisch helped amateur inventors develop working models of their inventions. "After starting a full-time model-making business, he became disillusioned by the lack of product development and marketing skills of amateur inventors. So he started coaching would-be inventors instead, supporting himself through consulting. About one in 30 prospective inventors decided to pay to have Milburn develop his model" (Becher).

The Machine Shop represents Milburn's dream, partly realized, of an institute where inventors and their families could come and stay. He offered visiting inventors not only the use of the lab facility, but a place to sleep and eat while working on their invention. Six small cabins were planned for the property, but there is no evidence that they were ever built. Instead, those inventors' families may have been housed in the office of the workshop.

While the family vacationed, Frank and the inventor would concentrate on developing a working prototype from the inventor's ideas. Although Frank never fully implemented his plan, he coached thousands of would-be inventors from the 1940s into the 1960s.... Along the way, Frank's syndicated news columns and television programs brought an avalanche of mail and visitors to sleepy Burlington. (ibid.)

<u>Patents</u>. Research into Milburn's personal inventions is still ongoing. During his career Milburn recorded several patents under his own name, including the following:

Apparatus for fertilizing #2057785 (October 20, 1936)
Bottle holders #2075217
Milburn Water Filter (number unknown--1949)—purified tap water for darkroom use (Becher).

While little is yet known of the bottle holder and water filter, a Milburn Grass Grower, part of the apparatus for fertilizing, was located recently in Boone County. Much like the hose-end sprayers used widely by gardeners today, this device attached to the end of a garden hose to deliver fertilizer-rich water to lawns (Becher, personal communication).

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Military consulting work. During World War II, Milburn served as a technical consultant to the United States military, helping to solve complex engineering problems. He was retained as a consultant by numerous defense contractors and designed ways to boost production. In addition, he quietly manufactured components for one of America's most closely guarded military secrets of the Second World War: the Norden bombsight, an analog computer that was used to determine the exact moment bombs had to be dropped to hit the target accurately.

This device for accurately dropping bombs from aircraft was one of the United States' most closely guarded secrets of World War II. It was originally designed for use on U.S. Navy aircraft by Carl Norden, a Dutch engineer educated in Switzerland who immigrated to the U.S. in 1904. The device used a mechanical analog computer comprised of motors, gyros, mirrors, levels, gears, and a small telescope. The bombardier input the necessary information (airspeed, altitude, etc.) and the bombsight would calculate the trajectory of the bomb being dropped. Near the target the aircraft would fly on autopilot to the precise position calculated by the bombsight and release the ordnance. Using this device, bombardiers could drop their bombs within a 100-foot circle from an altitude of well over 20,000 feet (Hill Aerospace Museum, "Norden Bombsight").

Charles D. Bright described the bombsight in his Historical Dictionary of the U.S. Air Force:

Precision bombing required meticulous control; to accomplish this, the Norden incorporated a gyrostabilized automatic pilot. The mechanism was modified in 1941 by the Minneapolis Honeywell Company and designated the Army C-1 autopilot. This modification enabled a bomber to be flown on a straight, level course, giving the bombardier a steady platform on which to operate the bombsight during the bombing run.

Also known as the "Blue Ox," the Norden could quickly calculate and correct directional changes due to wind drift. Flying at a preset altitude, it could rapidly compute the correct bomb release angle for a constant speed of closure to the aiming point. Under optimal conditions on an undisturbed run, the accuracy of the device was excellent. However, any last second changes in the altitude of the bomber, such as those encountered during battle, could markedly influence the

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accuracy of the sight." (National Park Service, "Aviation: From Sand Dunes to Sonic Booms")

It appears that Milburn's work on the bombsight was done for the Gruen Watch Company of Cincinnati, which in turn was subcontracted to the Triplett Corporation, located in Bluffton, Ohio. Milburn also supplied some engine components directly to the Wright Aeronautical Corporation, a defense contractor located in suburban Cincinnati.

[Milburn] has done some rare precision work for a watch company to facilitate that company's wartime production of precision measuring instruments.... He did considerable engineering and production on a tiny item that went into aircraft engines built by Wright Aeronautical Corp. And he answers the call of many manufacturing companies around the country for special engineering work. (Cronin, quoted in Becher)

"The component was used in the bombsight's gyroscope and was subcontracted to Frank because Gruen did not have machinery capable of manufacturing the part(s) to the specified tolerances.... Every other week, Frank would take a box of completed components and his sidearm and drive over to Time Hill [home of Gruen] to deliver the components" (Becher). The milling machine used by Milburn was registered with the United States government because it could be used to cut currency dies (Carol Schwartz Milburn, personal communication to Matthew E. Becher).

Milburn continued to work on military projects once peace returned. During 1950 and 1951, Milburn used his newspaper column and ham radio to compile lists of small machine shops for the military. Frank photographed and analyzed flying bumblebees for potential aviation applications (Becher).

Milburn Machine Shop. In 1938, Milburn bought an 8.5-acre lot on the north side of Burlington and constructed a concrete-block machine shop measuring 32 x 100 feet. He hired local Burlington men to construct the building, paying them \$2.00 per day for their labor (Matthew E. Becher, personal communication). The machine shop was the first manufacturing plant built in or near Burlington. Milburn had not decided exactly what he would manufacture in the new facility. "Milburn stated that he had not thoroughly decided as to what kind of articles would be manufactured here, although he did say that he was a manufacturer of lathes, dies, and other metal articles, and that the type of work

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in the Burlington factory would depend on the kind of labor he would be able to obtain" (*Boone County Recorder*, June 15, 1938). He referred to the Burlington plant as an "experiment," noting that the Osgood plant and its workers might move there "if conditions warrant it." (They did not.)

The Boone County Recorder hoped that Milburn's new factory would attract other manufacturers to the area, which did not happen. At the time, there was only one other factory in Boone County: the Walton Canning Factory, located in the city of the same name. "This factory will no doubt be an asset to our community, and the county as a whole, and if successful will probably lead to other factories coming to our county" (Boone County Recorder, June 15, 1938). The decade-long economic downturn doubtless influenced local hopes for industrial development. As it turned out, no additional industrial facilities were built in the county until c. 1950, when a pie factory opened in Burlington.

There is little documentation pertaining to the pre-World War II operations of the Milburn Products Company in Burlington. The building was filled with machine shop equipment, electronics test equipment and chemical lab equipment, as well as ham radio equipment. Undated archival photos of the machine shop from the 1960s show the rooftop bristling with radio antennae.

Early life and education. Frank Milburn was born in Louisville and moved with his family to the Cincinnati suburb of Fort Mitchell, Kentucky, in the 1910s. His father was president of the Sinesimer Clothing Store in Cincinnati. His mother was related to the Sinton family who owned the Sinton Hotel in downtown Cincinnati: one of the city's most famous 19<sup>th</sup>-century hostelries.

Milburn's first workshop was in the basement of his Fort Mitchell home. There he repaired record players, made models of inventions, and kept his mother awake at night by tapping out Morse code on the bed rail (George Laycock, "When an Inventor Needs a Friend," *Mechanix Illustrated*, October 1953, quoted in Becher).

Milburn graduated in 1931 from the Ohio Mechanics Institute in Cincinnati, a highly regarded technical school founded in the 1830s that is now part of the University of Cincinnati. He also apprenticed as a watchmaker in Ludlow, Kentucky. Upon graduation

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he went to work making dies for an Indiana company specializing in vacuum cleaner parts (ibid.).

Media coverage. Newspaper and magazine articles and TV shows helped publicize Milburn's work. Milburn was ghost-writer for the "Genius at Work" column in the Cincinnati Enquirer, which ran for 18 months beginning in 1949. An article in the August 7, 1949, Cincinnati Enquirer about the machine shop "brought a flood of inventors" to the Boone County seat. Milburn began a twice-weekly column about new inventions in the Cincinnati Post in 1950. "Frank's column gave practical advice to budding inventors and showcased real life success stories" (Images). "About 80 percent of the inquiries are of questionable usefulness, but the other 20 percent contains useful and potentially worth-while ideas for new products..." (Cronin, quoted in Becher). Of his work, Milburn remarked, "If we could put across the ideas of those 20 percent it would make jobs and generate business" (ibid).

After one year, the "Invenoscope" column generated 3,700 letters to *Post* offices. Five hundred inventors called Milburn personally and "250 came to Burlington with their inventions tucked lovingly under their arms." A *Popular Mechanics* June 1950 article resulted in 30,000 letters and 500 visitors from as far away as California. An October 1953 article in *Mechanics Illustrated* generated 17,000 letters and 300 hopefuls (Becher).

In 1952, Milburn hosted a 12-week television show for WCPO-TV in Cincinnati. The show focused on inventors who appeared in "The Invenoscope" column in the *Cincinnati Post*. It was very successful, but Milburn discontinued it because he felt his time was better spent on print media, which reached more people than the TV shows. In 1954 Milburn wrote series of articles for United Features Syndicate's *Spotlite* series, which also generated huge volumes of mail: 50,000 letters, many visitors and long-distance phone calls.

Ham radio, however, was Milburn's most consuming hobby. A radio transmitter housed in the Burlington workshop could reach 50,000 watts of power, which was 50 times the limit for amateur transmitters. During the 1950s and 1960s, Milburn also helped write and edit a publication for ham radio enthusiasts called DX Magazine (Becher).

Milburn's desire to assist other inventors was doubtless influenced by his strong patriotism and conservative political views, which may have developed as a reaction to

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the New Deal. He held the opinion that socialistic tendencies and anti-business views infected the United States economy. He believed that successful product development would generate support for business and free enterprise. As he stated in a promotional brochure advertising his newspaper column (emphasis in original):

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#### MR EXECUTIVE

This man is one of <u>millions</u>
Will he vote for more controls on your business
Will he elect representatives hostile to business
He works in your plants—He buys your products
He wants to be your friend

#### MR EXECUTIVE

You can bolster our waning system of free enterprise You alone can stop this swing toward socialism You can sell capitalism to the masses (Frank S. Milburn, "Through the Invenoscope," n.d.)

<u>Hobbies.</u> In addition to his professional work, Milburn's hobbies included photography, design and development of electronic devices for use in color separation for amateur use, designing and building fine furniture, collecting and restoring old watches and clocks, collecting and polishing semi-precious stones and minerals, and running an experimental farm (Becher).

Research design. The significance of the Frank S. Milburn Machine Shop was evaluated by comparison with other properties associated with the context of invention in Boone County. Two of these resources were identified during a comprehensive survey of the county's historic and architectural resources conducted from 1993 to 1996. Both were recommended for National Register listing under Criterion B.

The Thomas Zane Roberts Farm (BE-1057) near Belleview is the most significant property associated with the life and career of Thomas Zane Roberts (1851-1925), a gifted inventor, educator and polymath whose fame spread far beyond the quiet, western Boone County community he called home. Known as "Professor" Roberts, he taught in rural schools for over twenty years, in addition to teaching music classes. He was also a skilled farmer, carpenter and miller.

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Despite the local fame he garnered from his teaching career, Roberts is best known for the invention of a series of labor-saving gadgets for the home and farm. Much like Thomas Jefferson's Monticello, Roberts' home on Middle Creek Road-which he designed and built himself—became a showplace for these devices. These included a swinging bed suspended from the ceiling, a fireplace vented with outdoor air, a conveyor to carry tobacco and hay from hilltop fields directly to the mill/barn, and a piping system to bring water from a spring on the nearby cliffs. It does not appear that any of these inventions was ever patented or introduced commercially.

Roberts is most famous, however, for a remarkable solar clock, famed as the "clock of Middle Creek," The grandfather-style clock, standing seven feet tall, includes a Seth Thomas timepiece, a planetarium, a lunararium, and a dial showing the days of the week. The clock features an eight-day spring motor that sounds an alarm as it runs low and keeps ringing until attended to. Prior to beginning the work, Roberts built a lookout tower behind the house that was equipped with a powerful telescope, and studied the heavens for a year to make the necessary calculations. Following Roberts' death, visitors from all over the world, including Swiss watch and clock makers, traveled to Middle Creek to see the famous clock.

The Roberts farm includes a temple-front farmhouse, a former mill converted to a barn, and a series of contemporary and visually compatible farm and domestic outbuildings. In addition to Criterion B, the property was recommended for listing under Criterion A as the most intact property associated with the context of milling in Boone County.

The Sperti Farm (BE-1057) near Burlington is the most significant property associated with George Speri Sperti (1900-1991), an engineer, inventor and scientific researcher of considerable renown. After completing his doctorate, Sperti became the director of the University of Cincinnati's Basic Science Research Laboratory. The laboratory investigated the effects of different kinds of light on living organisms. He later became the director of the Institutum Divi Thomae, a graduate school established by the Archdiocese of Cincinnati, which concentrated on cellular research. Here Dr. Sperti developed his lifelong passion of finding a cure for cancer (Cincinnati Magazine August 1982, pp. 50-51). By the 1940s, Dr. Sperti was one of the six American members of the Pontifical Academy of Sciences (Federal Writers Project 1943 300). Among Dr. Sperti's inventions and discoveries were an electric motor sold to the Westinghouse company; a

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selective process for the commercial irradiation of foods, sold to the General Foods Corporation; and a salve for the cure, without scarring, of severe burns.

George Sperti purchased the land for his Boone County farm in the 1930s. While he initially used the property as a summer residence, he eventually lived there year-round. The Colonial Revival-style main house was built to his own design, using materials found on the property, as were visually compatible farm manager and farmworker houses. On this 250-acre "gentleman farm" Sperti raised cattle, corn, tobacco and horses; he also raised the rats and rabbits used in his medical research.

In addition to Criterion B, the Sperti farm was recommended as eligible under Criterion A in the Area of Agriculture as a significant example of a gentleman farm in Boone County, and under Criterion C in the Area of Architecture as an ensemble of Colonial Revival buildings unique in the county. The property has since been subdivided and many of its outbuildings have been demolished; therefore, it no longer appears eligible for listing under Criterion A. The main house, however, is still standing, and may still be eligible for listing under Criterion B for its associations with Sperti, and under Criterion C as a significant expression of the Colonial Revival style in the county.

While Sperti and Roberts gained fame by inventing new products and industrial processes, Milburn's main contribution to invention was to improve on the ideas of others. He specialized in taking an idea and making it reality, rather than coming up with ideas of his own. Over the course of his life, he developed countless prototypes for other inventors. These contributions, however, are hard to document, because little paperwork exists. Therefore, developing a well-detailed context statement for the Frank S. Milburn Machine Shop was hampered by difficulty of obtaining information on his actual inventions and prototypes. While Milburn's "Invenoscope" columns indicate that he developed countless prototypes for budding inventors, very little documentation for these items exists. Tracing the outcome of these projects, if possible, would require a research effort well beyond the scope of this individual nomination. Milburn's work during World War II is also difficult to track because he worked mainly as an analyst. None of his records survive, and many of the companies he worked for no longer exist. Therefore, this nomination author drew upon the following primary and secondary resources organized by Matthew E. Becher of the Boone County Planning Commission: writings by Milburn, newspaper and magazine articles, and clippings and miscellany from the Milburn archives.

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Based on the available information about Milburn's life and work, it appears he occupied a unique niche among local inventors of the mid-20<sup>th</sup>-century. Based on the available histories, no other northern Kentucky inventors have been identified who made it their life's work to assist amateur inventors as did Milburn. Therefore, the Frank S. Milburn Machine Shop appears to meet National Register criterion B for its associations with the life and work of this gifted person.

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### 9. Major Bibliographic References

Becher, Matthew E., Boone County Rural/Open Space Planner. Personal communication to Margo Warminski, June 10, 2005.

Becher, Matthew E. "Frank S. Milburn: Burlington's Cornfield Edison." Paper presented to Boone County Historical Society, May 2005. On file at Boone County Historic Preservation Office, Burlington, Kentucky.

Hill Aerospace Museum. "Norden Bombsight." Available online at http://www.hill.af.mil/museum/photos/wwii/norden.htm. Accessed February 2, 2005.

Milburn archives, including photographs, films, letters, manuscripts and patent applications. Boone County Historic Preservation Office, Burlington.

Milburn, Frank S. "Through the Invenoscope: A Challenge to American Executive Power: Inventions Plus Production Equals Jobs," n.d. On file at Boone County Historic Preservation Office, Burlington.

National Park Service. "Aviation: From Sand Dunes to Sonic Booms," National Park Service travel itinerary. Available online at www.cr.nps.gov/nr/travel/aviation/sec.htm. Accessed February 2, 2005.

Wilcox, Laurie, Robert Schrage, Matthew E. Becher, Michael D. Rouse. *Burlington*, Images of America. Charleston, South Carolina: Arcadia Publishing, 2004.

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KY ☐ University ☐ Other			
Name of repository: Kentucky Heritage Council			
10. Geographical Data			
Acreage of Property 8.62 acres			
UTM References (Place additional UTM references on a c	continuation sheet)		
Zone Easting Northing	Zone Eas	ting Northing	
1 16/697330/4322728 2	3		
2		tinuation sheet.	
Verbal Boundary Description (Describe the boundaries of the property	y on a continuation sh	eet.)	
Boundary Justification (Explain why the boundaries were selec	ted on a continuation	sheet.)	
11. Form Prepared By			
name/title Margaret Warminski, F	listoric Preservation	Consultant	
organization Boone County Histo	ric Preservation Rev	view Board Date June 22, 2005	
street & number 340 East Second S	treet_telephone_85	9-581-2883	
city or town Newport state KY	zip code 4107	1-1702	
Additional Documentation			
Submit the following items with the com-	pleted form:		
Continuation Sheets			
Maps A USGS map (7.5 or 15 minute serie A Sketch map for historic districts a		operty's location. g large acreage or numerous resources.	
Photographs Representative black and white photographs	otographs of the pro	perty.	
Additional items (Check with the SHPO or FPO for any a	dditional items)		
Property Owner			
(Complete this item at the request of the	e SHPO or FPO.)		
name Carol Schwartz-Milburn, M.I	<b>)</b> .		
street & number 127 Summer Lane	telepho	one _859-543-1122	
city or town Crestview Hills	_ state_ <u>KY</u> _zip co	ode _41017	

NPS Form 10-900-a	OMB No. 1024-0018
(8-86)	
United States Department of the Interior	
National Park Service	
NATIONAL REGISTER OF HISTORIC PLACES	
CONTINUATION SHEET	
10 1	
Section Page	
Milburn, Frank S., Machine Shop	
Burlington Boone County Kentucky	

#### 10. Geographic Data

**Boundary description.** The Frank Milburn Machine Shop is located within the corporate limits of Burlington, Kentucky. It consists of Lot 2, Block E, of the Park Addition to Burlington. The property includes 8.62 acres. Please refer to map with boundary line drawn.

**Boundary justification.** This boundary includes all the land presently associated with the Frank Milburn Machine Shop. It includes sufficient land to provide a proper setting for the building excluding surrounding property now under different ownership or not historically associated with the building.

OMB No. 1024-0018

United States Department of the Interior National Park Service

NATIONAL REGISTER OF HISTORIC PLACES CONTINUATION SHEET

Section 12 Page 1

Milburn, Frank S., Machine Shop Burlington, Boone County, Kentucky

#### Additional Documentation

Photograph Key

Name of property: Frank S. Milburn Machine Shop (same for all photographs)

Location: 5844 North Orient Street, Burlington, Boone County, Kentucky (same for all

photographs)

Photographer: Margaret Warminski (same for all photographs)

Date taken: January 2005 (same for all photographs)

Location of negatives: Boone County Planning Commission, Burlington, Kentucky

(same for all photographs)

View: General view of Milburn Machine Shop property. Looking northeast toward

building from North Orient Street.

Photo 1

View: Main façade (west elevation) and north elevation of Machine Shop building. Looking southeast.

Photo 2

View: Main façade of building, looking east.

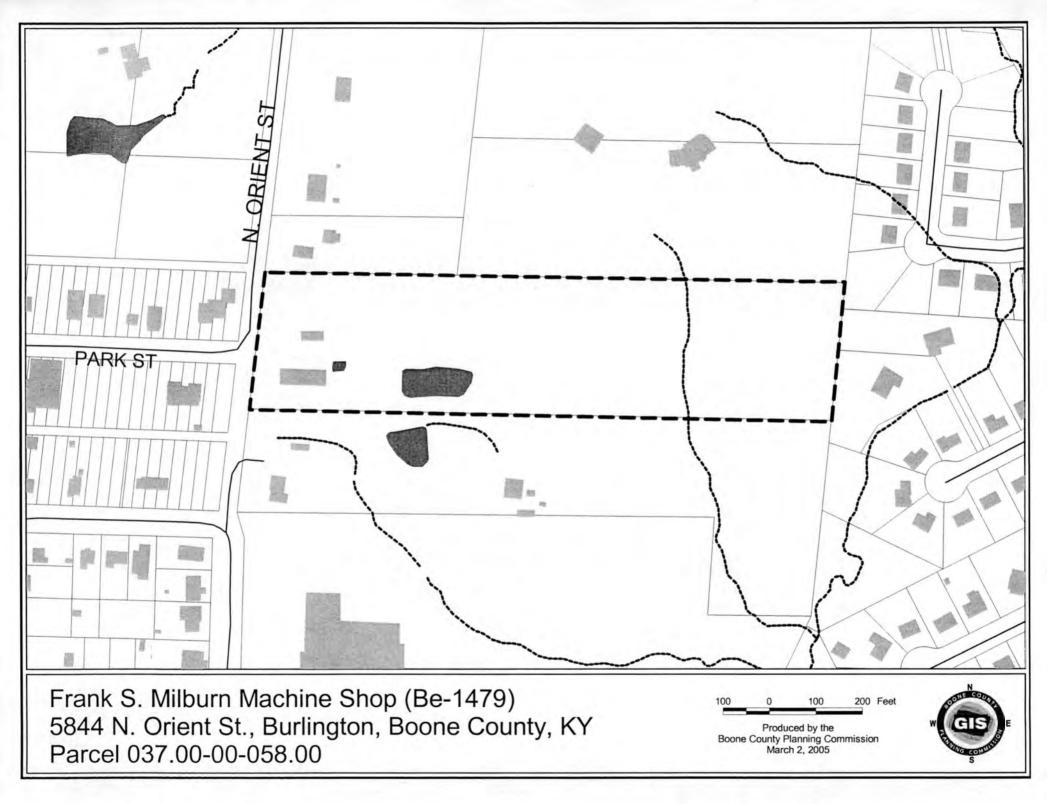
Photo 3

View: Rear (east) elevation of building; partial view of north elevation. Looking southwest.

Photo 4

View: View of noncontributing shed and contributing garage on Milburn property. Looking northwest.

Photo 5



# UNITED STATES DEPARTMENT OF THE INTERIOR NATIONAL PARK SERVICE

## NATIONAL REGISTER OF HISTORIC PLACES EVALUATION/RETURN SHEET

REQUESTED ACTION: NOMINATION

PROPERTY Milburn, Frank NAME: MULTIPLE	bit machine shop
NAME:	
STATE & COUNTY: KENTUCKY	, Boone
DATE RECEIVED: 10/12 DATE OF 16TH DAY: 11/24 DATE OF WEEKLY LIST:	
REFERENCE NUMBER: 050013	11
REASONS FOR REVIEW:	
OTHER: N PDIL:	N LANDSCAPE: N LESS THAN 50 YEARS: N N PERIOD: N PROGRAM UNAPPROVED: N N SLR DRAFT: N NATIONAL: N
COMMENT WAIVER: N	
ACCEPTRETURN	REJECT
ABSTRACT/SUMMARY COMMENTS	
	Manual To the
RECOM./CRITERIA	
REVIEWER	DISCIPLINE
TELEPHONE	DATE
DOCUMENTATION see attached	d comments Y/N see attached SLR Y/N
	ed to the nominating authority, the
nomination is no longer un	nder consideration by the NPS.



Franks. Milburn Machine Shop, Burlinston, Boone Co. 1



Frank S. Milburn Machine Shop, Burlington, Boone 2



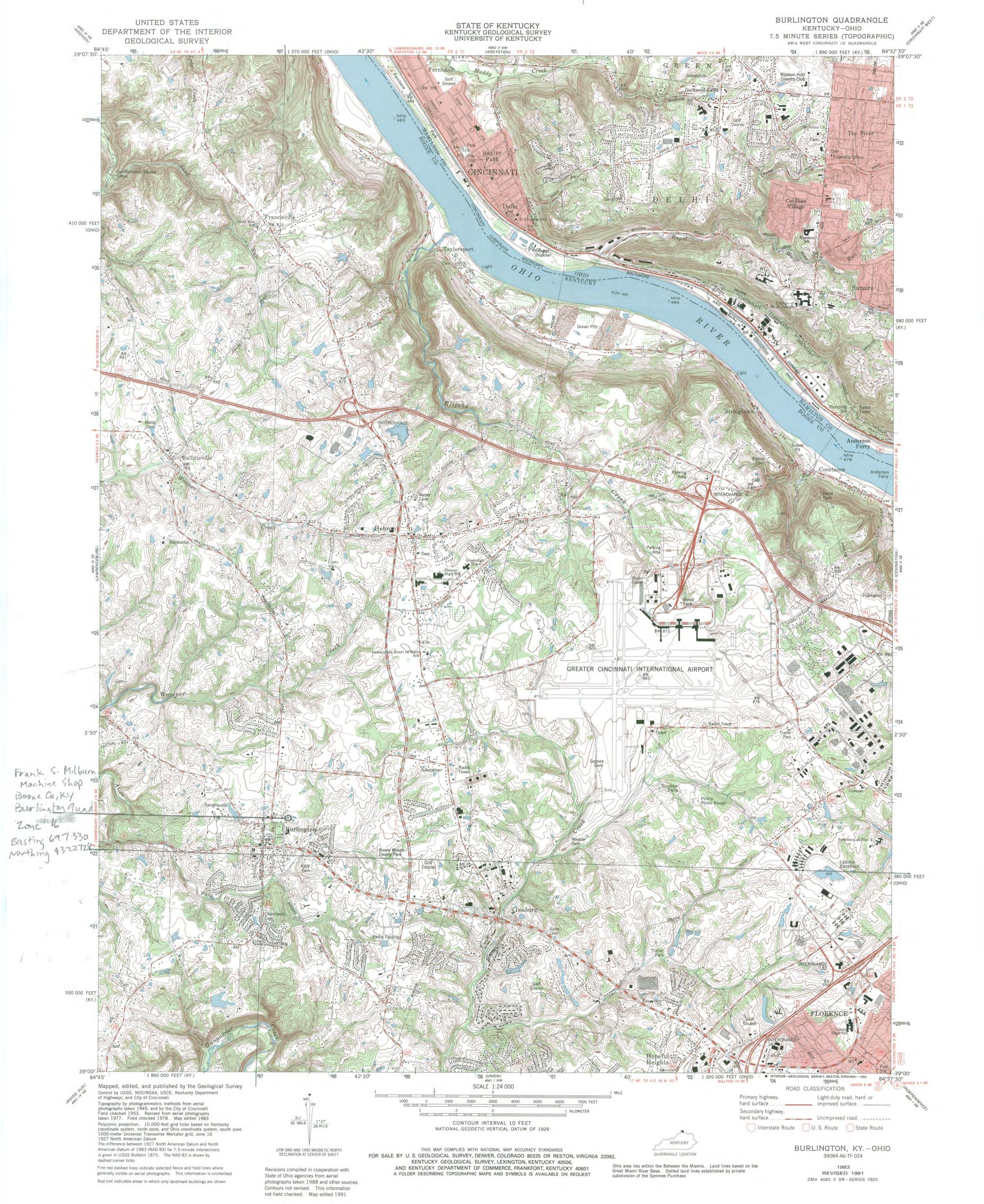
Franks. Milburn Machine shop, Burlington, Boone 3



Franks. Milburn Machine Shop, Burlington, Boone co. 4



Frank. S. Milburn Machine shop, burlington, boone Co, 5 NY





001 1 2 2005

#### COMMERCE CABINET KENTUCKY HERITAGE COUNCIL

Ernie Fletcher Governor

The State Historic Preservation Office 300 Washington Street Frankfort, Kentucky 40601 Phone (502) 564-7005 Fax (502) 564-5820 www.kentucky.gov October 5, 2005 W. James Host Secretary

David L. Morgan
Executive Director and
State Historic Preservation Officer

Ms. Janet Matthews, Keeper National Park Service 2280 National Register of Historic Places 1201 "I" (Eye) Street, NW 8<sup>th</sup> Floor Washington DC 20005

Dear Ms. Matthews:

Enclosed are nominations for 19 properties approved at the 9/29/05 Review Board meeting:

Edward and Julia Satterfield House Allen County, KY Code House Boone County, Kentucky J.Q.A. Stephens House Boone County, Kentucky W.F. and Florence McKim House Boone County, Kentucky Frank S. Milburn Machine Shop Boone County, Kentucky Dr. Gladys Rouse Office and Residence Boone County, Kentucky John and Ann Catherine Mayhugh House Boone County, Kentucky Nicholas S. and Gertrude E. Blau House Boone County, Kentucky John G. Tomlin House Boone County, Kentucky Dinsmore Homestead (Boundary Increase) Boone County, Kentucky Henry and Agnes Rolsen House Boone County, Kentucky Tradewater River Dam and Riverside Park, Caldwell County, Kentucky Handy Farm Harrison County, Kentucky Pearce-Wheeler Farm Hart County, Kentucky Simeon Lewis Historic District Jefferson County, Kentucky Ford Motor Plant Jefferson County, Kentucky Fifth District School Kenton County, Kentucky St. Augustine Church Complex Kenton County, Kentucky Pogue House Mason County, Kentucky

Also enclosed is additional documentation for two listed Kentucky properties, the S.S. Bush House, Jefferson County (#79000998) and the Burlington Historic District (Boundary Decrease, Boundary Increase), Boone County, whose most recent additional documentation was approved on 8/3/05.

We appreciate your assistance with these actions.

David L. Morgan, SHPO and

Executive Director

Kentucky Heritage Council

