

NATIONAL HISTORIC LANDMARK NOMINATION

NPS Form 10-900

USDI/NPS NRHP Registration Form (Rev. 8-86)

OMB No. 1024-0018

COLTSVILLE HISTORIC DISTRICT

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United States Department of the Interior, National Park Service

National Register of Historic Places Registration Form

1. NAME OF PROPERTY

Historic Name: Coltsville Historic District

Other Name/Site Number: Colt Industrial District; Samuel Colt Home (Armsmear)

2. LOCATION

Street and Number: Curcombe Street, Huyshope Avenue, Van Block Avenue, Vredendale Avenue, Van Dyke Avenue, Wethersfield Avenue, Wyllys Street - see addresses, Item 7

Not for publication:

City/Town: Hartford

Vicinity:

State: Connecticut County: Hartford Code: 009

Zip Code: 06106

3. CLASSIFICATION

Ownership of Property
Private: X
Public-Local: X
Public-State:
Public-Federal:

Category of Property
Building(s):
District: X
Site:
Structure:
Object:

Number of Resources within Property

Contributing
37
1
1
1
40

Noncontributing
19 buildings
sites
5 structures
objects
24 Total

Number of Contributing Resources Previously Listed in the National Register: 41

Name of Related Multiple Property Listing: N/A

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4. STATE/FEDERAL AGENCY CERTIFICATION

As the designated authority under the National Historic Preservation Act of 1966, 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.

Signature of Certifying Official

Date

State or Federal Agency and Bureau

In my opinion, the property ____ meets ____ does not meet the National Register criteria.

Signature of Commenting or Other Official

Date

State or Federal Agency and Bureau

5. NATIONAL PARK SERVICE CERTIFICATION

I hereby certify that this property is:

- ____ Entered in the National Register
- ____ Determined eligible for the National Register
- ____ Determined not eligible for the National Register
- ____ Removed from the National Register
- ____ Other (explain):

Signature of Keeper

Date of Action

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6. FUNCTION OR USE

Historic:

Industry:
Domestic:
Domestic:
Religion:
Landscape:

Sub:

Manufacturing Facility
Multiple Dwelling
Single Dwelling
Religious Facility
Garden

Current:

Commerce:
Domestic:
Domestic:
Religion:
Landscape:

Sub:

Business, Professional, Organizational
Multiple Dwelling
Single Dwelling
Religious Facility
Park

7. DESCRIPTION

Architectural Classification: Italianate
Gothic Revival
Carpenter Gothic

MATERIALS:

Foundation: Stone, Concrete
Walls: Brick, Concrete, Brownstone, Half-Timbered Stucco, Synthetics
Roof: Asphalt, Slate, Corrugated Sheet Metal, EPDM
Other: Glass, Glass Block

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Summary

The Coltsville Historic District in Hartford, CT, is nationally significant because its resources illustrate important contributions to the development of the American economy and the improvements in manufacturing technology made by Samuel Colt (1814-1862) and the industrial enterprise he founded, Colt's Patent Fire Arms Manufacturing Company (hereafter referred to as Colt Fire Arms Company). Colt is renowned for developing an efficacious revolver design, revolutionizing personal firearms by eliminating the need to reload until five or six shots had been expended. His company drew upon the technological innovations of the firearms industry in New England to achieve an unprecedented level of mechanization and production. The Colt Fire Arms Company was a highly influential national source of innovation in precision manufacturing and firearms design well into the 20th century. The ultimate success of Samuel Colt's enterprise was due to his being a trail-blazing innovator in business organization and marketing, characteristics of the company that lasted long after his death.

As an entrepreneur, Colt put into place essential ingredients of the American manufacturing system: an innovative product, advanced manufacturing techniques, thorough mechanization, large-quantity production, successful marketing and distribution, and adept use of patents. Between Colt's death in 1862 and the 1920s, the Colt Fire Arms Company attracted some of the most innovative talents in firearms manufacturing. Richard Gatling, John Browning, and John T. Thompson, inventors who gave their names to machine guns, were associated with the company. During both World War I and World War II, the Colt Fire Arms Company was one of the nation's leading small arms producers. The expansion of the Samuel Colt Home (Armsmear) National Historic Landmark (NHL) designation to include the Coltsville Historic District is appropriate because it not only tells the story of this important industrial enterprise, but it is an example of a planned industrial district, with worker housing and social and religious buildings.

Describe Present and Historic Physical Appearance.

Coltsville is a historic district of manufacturing facilities, employee housing, community buildings, and landscape features built by the Colt Patent Fire Arms Manufacturing Company, largely under the direction of Samuel (Sam) Colt and his widow Elizabeth Colt. The district is a cohesive and readily identifiable area at the southern edge of downtown Hartford, CT. Started in 1855, Coltsville rose behind dikes that Sam Colt built to protect Hartford's South Meadows from periodic flooding by the Connecticut and Little Rivers. Originally, Coltsville occupied most of an irregular hexagon bounded on the northeast by parallel lines of the Connecticut River, Colt Dike, and Van Dyke Avenue; Warwarme Avenue, running on top of the southern leg of the Colt Dike, Wethersfield Avenue to the east, and Wyllys Avenue and Charter Oak Avenue on the north. The boundaries of the Coltsville Historic District, as nominated, include about two-thirds of the historic Colt family and company holdings and exclude areas that are now occupied by 20th-century buildings with no Colt association. These non-historic areas are primarily along the northwest edge and southeast corner of the former Colt holdings.

The Coltsville Historic District expands upon the existing Samuel Colt Home (Armsmear) National Historic Landmark. Armsmear was home to firearms manufacturer Samuel Colt and his wife Elizabeth, who oversaw the firearms company from his death in 1862 through 1901. The Coltsville Historic District includes the manufacturing complex of Colt's Patent Fire Arms Manufacturing Company (hereafter referred to as Colt Fire Arms Company) constructed between 1855 and 1942. The principal building episodes were 1855-59, when the original buildings, including the existing Forge Shop and Foundry were erected; 1867, when several buildings including the existing East Armory were rebuilt on their original foundations following a 1864 fire; and the

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World War I period, when the plant was expanded with several reinforced-concrete buildings. Coltsville also includes 19 dwellings that were built for workers in the arms factory and related Colt enterprises, including ten vernacular six and eight-family tenements and nine two-family Carpenter Gothic “cottages”; an architecturally elaborate Episcopal church (1869) and parish house (1896), built to serve the surrounding community by Elizabeth Colt; Colt Park, originally the grounds of the Colt estate, given to the City of Hartford for public park purposes at the time of Elizabeth Colt’s death in 1905, and the Colt Dike. The district forms a cohesive whole in the south end of Hartford, CT, stretching from Armsmead and three Colt-owned houses on Wethersfield Avenue eastward through Colt Park to the factory buildings, church, and worker housing, close to the Connecticut River.

As detailed in Section 8, below, the period of significance for the Coltsville Historic District is from 1855 until 1945. Coltsville and its structures have long been recognized as nationally significant. Armsmead was listed as a National Historic Landmark in 1966. The James B. Colt House at Wethersfield Avenue is listed individually on the National Register of Historic Places, as are the Church of the Good Shepherd and Caldwell Colt Memorial Parish House at 150 Wyllys Street. In 1976 the Colt factory buildings, Colt Park, the worker housing, and the previously individually-listed components were listed on the National Register as the Colt Industrial District. The two brick Queen Anne-style houses, at 180 and 184 Wethersfield Avenue, built by Mrs. Colt to house senior managers of the company, were listed on the National Register as part of the Parkside Historic District in 1985.

As a district, Coltsville retains a high degree of integrity of location, design, setting, materials, workmanship, feeling, and association. The location, setting, feeling, and association of Coltsville maintain their integrity since the site is the same one laid out by Samuel Colt in 1855 in Hartford’s South Meadows and significant buildings from the period of significance are still standing. The topographical features, including Colt Dike, street layouts and street and place names, have substantially been in place since 1855. The names that Samuel Colt gave Streets in Coltsville were intended to describe the historical evolution of Hartford, culminating in the Colt Fire Arms Company. There are Indian street names, such as Wawarme, Maseek, and Sequassen; Dutch names, such as Van Dyke, Huyshope, and Van Block; and English names, such as Haynes and Wyllys.

Coltsville conveys a feeling that reflects the historic sense of an urban industrial community of the latter 19th and early 20th centuries. The Coltsville Historic District is a cohesive cultural landscape that reflects the industrial social hierarchy, with the Colt family and other managers residing in mansions on the hill overlooking the Colt factory and the homes of workers. The industrial district gives physical expression to the social relations inherent in the industrial enterprise. Coltsville exemplifies the “metropolitan path to industrialization,” which the “American Labor History Draft Theme Study” describes as the industrial districts that grew up in existing cities as opposed to industrial districts built *de novo* at such sites as Lowell, Lawrence, and Holyoke, MA.¹ Metropolitan industrial districts tended to develop because they utilized steam power, which could be employed virtually anywhere, while the specialized mill cities were sited to take advantage of waterpower. The Colt armory was powered by steam.

Perhaps most importantly, Coltsville maintains its association with Samuel Colt, Elizabeth Colt, and the Colt Fire Arms Company which they founded and developed. The factory complex, their residence, worker housing, and church and social institutions remain to interpret those associations.

¹ National Park Service, “American Labor History Draft Theme Study” (Washington, DC: National Park Service, 2003), p. 18.

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The design, materials, and workmanship of the factory complex have evolved over the years, reflecting the evolution of factory design and construction technologies through the late 19th and early 20th centuries. Two structures—the Fire Shop and the Foundry—are still standing from the original 1855 factory; the signature East Armory (with blue onion dome, which has become the premier symbol of Hartford's industrial heritage), rebuilt in 1867, the South and North Armories and the Machine Shop, built in 1916 for the buildup to World War I; the warehouse (ca. 1916), the World War II office building (1942), and several other ancillary structures. The original East Armory (1855) burned in 1864 and was rebuilt three years later. The West Armory, built in 1861, and infill buildings located between the East and West Armories were demolished in 1947. (The West Armory was mainly used for gun-making during the Civil War, World War I, and World War II. The rest of the time, it was used for manufacturing other products, such as plastics, and was leased to other companies for various manufacturing activities.) During the World War I period, the complex's manufacturing space was substantially increased with the addition of the reinforced-concrete North and South Armories. During World War II, the factory's original Italianate office building was replaced by an Art Moderne brick building. Many of these changes directly resulted from the Colt company's long-time position as a major American arms manufacturer, a position that entailed substantial expansion, particularly in the World War I period.

The surviving factory buildings enable the visitor to understand the evolution of the Colt Fire Arms factory from its establishment in 1855 until its decline following World War II. The exteriors appear very much as they did during the period of significance. The interiors have not housed substantial gun manufacturing operations for over 40 years (a limited amount of firearms design and testing occurred in the Machine Shop as late as 1993). In recent decades, much of the space was subdivided for use by small businesses, artist studios, and a limited number of apartments. In 2004, a developer of the factory complex transformed the Machine Shop into office space. The brick warehouse (ca. 1916) was renovated for school and office use in 2003, and the Art Moderne office building (1942) is vacant.

The Italianate exterior of Armsmear (1857) has been modified, but it still retains much of its original architectural form and features. The Moorish pavilions and glasshouses that once surrounded Armsmear were removed during the first decade of the 20th century. Fulfilling the will of Elizabeth Colt, Armsmear was converted to a retirement home after her death in 1905. The interior was altered to create apartments, but three public rooms remain relatively unchanged and retain much of the original decoration. Many of the furnishing and works of art owned by Elizabeth Colt are in the collection of the Wadsworth Atheneum (A new permanent exhibit for this collection is being installed in 2005). The retirement home was expanded with a 1910 addition to the main house and with freestanding buildings erected in 1928, 1960, and 1967.

Colt Park, which had contained the gardens of the Colt family before being bequeathed to the City of Hartford in 1905, now is used mainly for athletic fields, but the sense of the estate grounds can still be appreciated. Colt Park has a large public swimming pool, a running track, and ball fields. Despite these modifications, Colt Park adds to the district by including two important Armsmear-related ancillary structures and by continuing its historic function of a large open green space with vistas between the Colt residence and the factory in the Coltsville section of Hartford.

The Italianate James Colt House (1856) has been subdivided for apartments, but its exterior retains most of its original Italianate features. The Elizabeth Colt Rental Houses (1885) at 180 and 184 Wethersfield Avenue, built by Mrs. Colt to house senior managers at the armory, now house offices. The exterior and interior of the polychrome stone Gothic Revival Church of the Good Shepherd (1869) and its Caldwell Colt Memorial Parish House (1896) appear very much as they did when they were built.

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Ten multi-family worker tenements (1856), across the street from the factory, and nine “Potsdam” cottages (1859), near the site of Colt’s willow ware factory, remain. The ten units of worker housing (1856) between Huyshope and Van Block avenues are relatively unaltered from their historic appearance. Another ten houses, built at the same time, stood on the block to the south, but they were demolished during World War II to make way for a parking lot that now occupies the site. Several of the nine “Potsdam” Carpenter Gothic cottages on Curcombe Street have been altered with 20th-century siding materials. Some of the Carpenter Gothic decoration has been removed from the “Potsdam” cottages, but their general setting and appearance are still maintained. The interiors, which are used for residential purposes, have been modernized.

The Coltsville buildings that remain from the period of significance maintain their integrity of materials and workmanship. Some of the factory buildings, namely the Machine Shop, Warehouse, and South Armory—have been rehabilitated, in compliance with the Secretary of the Interior’s Standards regarding character-defining features such as windows, roofs, and facades. The worker housing, Armsmear, James Colt House, and church buildings have exteriors that have been relatively well preserved.

Nearly all the buildings in the district are of masonry construction. The oldest components of the factory complex are of brownstone ashlar construction. The East Armory is built of brick and brownstone, and most of the World War I-period additions are reinforced-concrete construction. Most of the architectural detailing of the extant factory buildings remains. This includes the brownstone Forge Shop and Iron Foundry; the brick East Armory with its blue onion dome and advanced fireproofing features; the reinforced concrete North and South Armories and the Machine Shop; and the brick warehouse and the brick office building. Armsmear and the James B. Colt House are made of brick with stuccoed exteriors, and the brick worker tenements between Huyshope and Van Block avenues have their exteriors painted white. The Potsdam houses on Curcombe Street are of half-timbered construction, with partial brick walls.

Architectural stylishness in the district includes the elaborate, in the case of the Italianate Armsmear and James B. Colt House and the polychrome Gothic Revival Church of the Good Shepherd and Caldwell Colt Memorial Parish House. The Huyshope Street worker houses are vernacular in style except for the Gothic bargeboard used for the roof trim. The Gardener’s Cottage and the Potsdam houses incorporate both the woodwork and the distinctive form drawn from Carpenter Gothic picturesque cottage-type architecture. The East Armory incorporates quoins, pediments, dentils, and round and arched windows suggestive of an Italianate influence.

The noncontributing buildings in the district include the mid-20th-century garages associated with the Potsdam houses built by Samuel Colt in 1859. Other noncontributing buildings include the later retirement housing at Armsmear, the Colt Park headquarters building at 25 Stonington Street, later buildings in Colt Park built for park purposes, and a ca. 1975 parish house annex on the church property at 155 Wyllys Street. The remnant of the Colt Dike on Wawarme Avenue and Huyshope Avenue is a contributing structure because it was originally constructed in 1854 to keep out flooding from the Connecticut River and make buildable the floodplain where Coltsville was laid out. Samuel Colt’s original dikes no longer control flooding from the Connecticut River. They were superseded by far taller dikes built by the U.S. Army Corps of Engineers during the 1940s following disastrous floods in 1936 and 1938. Though surmounted by city streets, most of the original dike still exists.

The pavilion in Colt Park is a noncontributing structure, and the park’s various athletic facilities are features grouped together as a single noncontributing resource. The athletic fields were installed by the City of Hartford in Colt Park in the years immediately following Elizabeth Colt’s death. They have been modified to serve various sports over the years. The historic district includes one object, the large memorial statue of Samuel Colt in Colt Park commissioned by Elizabeth Colt shortly before her death. The statue is counted as contributing because it memorializes the founder of the Colt Fire Arms Company and Coltsville.

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The inventory which follows provides a complete listing of properties within the district and identifies their contributing and noncontributing components. The lettering and other nomenclature of the Colt industrial buildings follow the company's own scheme as reported in its building inventory and insurance maps. Style nomenclature reflects the National Register architectural classification data categories.

Individual Descriptions—Buildings:

Colt Armory Complex, 55 Van Dyke Avenue (includes 36-140 Huyshope Avenue, 7-34 Sequassen Street, 1-170 Van Dyke Avenue, and 49, 50, and 53 Vredendale Avenue), 1855-1942. The Colt industrial complex includes the following components:

East Armory, Building A², 1867, 55 Van Dyke Avenue (Contributing). The East Armory (Photograph 1), a 5-story gable-roofed building facing east toward Van Dyke Avenue and Interstate I-91, is perhaps the most visible and best-known part of the Colt industrial complex. It was built on the foundations of the original 1855 brownstone East Armory after that building was destroyed by fire in 1864. The existing building resembles its predecessor in overall size but is one story taller. The 1867 building was designed by General William B. Franklin, who was the company's general manager and a former U.S. Army engineer. The East Armory was always the main building for manufacturing Colt firearms.

The building measures 508 feet by 61 feet in plan, with the main entrance in the center of a five-bay pavilion that projects forward ten feet beyond the plane of the main part of the building. The entrance is set within a round brownstone arch, with similar arches containing loading doors on the second, third, and attic-level stories. The gable of the projection is treated as a pediment, with a full return of the dentilated brick cornice. The attic-level loading doors are flanked by circular windows. At the ends of the building, there are shallower gabled projections with a pair of round-arched windows flanked by circular windows for the attic. Other architectural detailing includes a brownstone molded cornice at the level of the second-floor window sills, brownstone quoins at all the corners and a brownstone stringcourse at the level of the third-floor window sills. Window openings have brownstone lintels and sixteen-over-twelve wooden sash.

Rising above the center of the East Armory is the complex's signature onion-shaped dome, painted blue with gold stars (the original 1855 East Armory had a similar dome). Sixteen wooden columns rise from an octagonal platform, creating an open area under the dome. On top of the dome is a gilded ball, above which is a gilded fiberglass replica of the original gilded wood Rampant Colt, a symbol of the company since Samuel Colt's time. (The original figure has been preserved and is on display at the Museum of Connecticut History.) The dome is made of sheet metal with iron tie-rods and an internal iron skeleton that provide structural support.

The interior framing of the East Armory consists of Phoenix-column posts supporting I-beams; shallow brick arches between the beams support the floors above and intended to act as fire stops (Photographs 2 and 3). Phoenix columns consist of four quarter-circle sections of rolled iron riveted together through projecting flanges. "Improved" Phoenix columns, patented in 1864 and used in the armory, have additional bars of iron riveted between the flanges to increase stiffness and provide mounting points for line shaft bearings. In the

² Colt company real estate records and Hartford fire insurance maps utilized a remarkably consistent system of letter designations for buildings in the manufacturing complex from the 1850s until sometime after 1945. Although functions and production operations within some buildings changed, their letter designations remained the same. The East Armory (Building A) and Center Armory (Building C), built on the foundations of their 1855 predecessors after the fire of 1864, were assigned the same letter designations as the originals.

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center of the armory, just within the Van Dyke Avenue main entrance, the internal framing is supported by the vertical cast-iron beds and piston-rod guides of four Porter-Allen high speed steam engines that once drove the armory's machine tools (Photograph 4). Although the crank shafts and eccentrics were replaced with straight shafting sometime after 1908, when the plant's line shaft system was converted to electric group drive, the engine beds, being structural, were left in place along with the piston rods, crossheads, connecting rods, valve links, and lower valve rods along with the pistons and cylinders, which project into the ceiling of the ground floor. The current roof of corrugated metal on iron trusses dates from a renovation of the 1890s.

During most its working life, the East Armory had machine shops on the first (ground) floor, handgun fitting and assembly on the second and third floors, packing and some firearms assembly on the fourth, and storage in the attic.

Recently used for commercial and light industrial space, the East Armory is currently mostly vacant and awaiting redevelopment. Part of the interior has been divided with gypsum wallboard partitions, while the upper floors are mostly open. The interior finishes consist of painted brick walls, hardwood floors, and painted brick ceilings. Some areas have had the paint removed, creating "exposed brick" surfaces.

Forge Shop, Building D, 1855, on the interior of the block bounded by Sequassen Street and Van Dyke and Huyshope Avenues (Contributing). The original armory forge shop (Photographs 5 and 7), where Colt's pioneering drop-forging operations took place, is a one-story gable-roofed building of random-ashlar brownstone. It is 40 feet wide and 225 feet long. The entire interior is open and unobstructed (Photograph 6). The slate roof is supported on wooden trusses, which are exposed in the building's interior. There is one small monitor atop the ridge of the roof in the center of the building. The south end of the building, where it once joined the spine running perpendicular to the East Armory, is made of brick. Later uses of the building, when forging was moved to other parts of the complex, included woodworking and general storage

Foundry, Building F, 1855, on the interior of the block bounded by Sequassen Street and Van Dyke and Huyshope Avenues (Contributing). The armory's original one-story gable-roofed foundry (Photograph 5) measures 40 feet by 225 feet in plan, with a slate roof and walls of brownstone ashlar. The entire interior is open and unobstructed. There are a series of rectangular skylights on each slope of the roof. It formerly connected to the complex's center spine, where now there is a brick end wall. Wooden roof trusses create a clear interior space. Later uses included sheet-metal operations. Originally equipped with cupola furnace for melting iron near the center of the building and a brass furnace at the south end, the building was later used for polishing operations and sheet-metal work.

North Armory, Building M, 1916, 7 Sequassen Street (Contributing): The reinforced-concrete North Armory (Photographs 5 and 7) has five stories with a sawtooth-monitor roof. The North Armory measures 63 feet by 243 feet in plan, with a 30 feet by 54 feet connector to the East Armory. In between the concrete piers the exterior walls consist of steel industrial sash and concrete and brick curtain walls. Each of the eight roof monitors is ventilated by two circular sheet-metal ventilators attached to the ends. The North Armory, and all but one of the lettered buildings that follow (M-W) were constructed during World War I before the United States officially entered the hostilities. This building was constructed by Aberthaw Construction Company, a leading firm in the construction of reinforced-concrete industrial buildings. The North Armory was originally used for the production of gun barrels. The company's drafting department occupied space under the sawtooth monitor on the top floor. Since being vacated by the Colt Fire Arms Company, it has been used for commercial and light-industrial purposes. The industrial space has been subdivided for small companies, and there are some wallboard partitions on floors that were completely open under the Colt Fire Arms Company. Currently, the building is mostly vacant and is awaiting redevelopment.

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Garage, Building O, ca. 1916, 53 Vredendale Avenue (Contributing): The garage (Photograph 8) is a one-story brick building measuring 52 feet by 82 feet in plan. The original window openings have been blocked up. Decorative effects include diamond-shaped insets at the top of the brick piers and corbeling above the block-up openings. The east elevation, facing Vredendale Avenue, has a stepped parapet and a central vehicular entrance closed by an overhead roll-up door. Steel trusses are exposed at the ceiling. It is currently in use as commercial space.

South Armory, Building P, 1916, 75 Van Dyke Avenue and 140 Huyshope Avenue (Contributing): The South Armory (Photographs 9 -11) has six stories. It is of reinforced-concrete construction, and measures 61 feet by 433 feet in plan, not including the two connectors at the ends, one of which joins the East Armory and the other which joined the now-demolished West Armory. Cornices on the street-facing elevations mark the division between the fourth and fifth stories. The wide window openings are mostly filled with pivoting steel industrial sash, though some are filled in with glass brick. The inside is partly open and partly partitioned into commercial and living space (the latter no longer occupied) with gypsum wallboard on steel studs. The open portions reveal the building's distinctive flaring columns of the type developed by C. A. P. Turner, in which the column reinforcement fans out into the surrounding floor slab, creating an especially strong and rigid structure (Photograph 10). This building was constructed by Aberthaw Construction Company. The South Armory was originally used to manufacture machine guns. There was a shooting range at the east end of the fourth floor. Between World War I and World War II, when weapons orders fell off, three floors were given over to manufacture of molded plastic products (ColtRock) and automotive brake linings. Since being vacated by the Colt Fire Arms Company, it has been used for commercial, light-industrial, and residential purposes. Currently, the building is mostly vacant and is awaiting redevelopment.

Machine Shop, Building R, 1916, 170 Huyshope Avenue (Contributing): The one-story machine shop (Photograph 11), measuring 196 feet by 490 feet in plan, has outer walls of brick and concrete and a sawtooth-monitor roof of seven north-facing monitors, supported internally on reinforced concrete framing. Circular sheet-copper ventilators are spaced along the crest of each monitor. The interior of the former machine shop, except for low removable partitions for office cubicles, is almost completely open (Photograph 12). It originally housed firearms production as well as a drafting room and offices. This building was constructed by Aberthaw Construction Company. Between the wars, it was used for the production of Colt electrical equipment. In 2004, the Machine Shop was renovated under Secretary of the Interior's Standards for Rehabilitation to become office space for an information technology company.

Power Plant, Building U, 1916, 49 Vredendale Avenue (Contributing): A single story high, the flat-roofed power plant (Photograph 8) is of reinforced-concrete construction and measures 96 feet by 52 feet in plan. Large window openings are fitted with steel pivot sash, and there is a molded cornice along the east or Vredendale Avenue elevation. At the north east corner is a tall circular brick smokestack with "COLT" spelled out vertically in black brick headers against a tan brick body. The plant continues to supply steam for heating the complex. The interior is an open space, accommodating large oil-fired boilers.

Warehouse, Building W, ca. 1916, 36-80 Huyshope Avenue, 34 Sequassen Street (Contributing): The warehouse (Photograph 13) is a two-story flat-roofed reinforced-concrete building. It has an L-shaped plan, with the portion along Huyshope Avenue measuring 275 feet by 80 feet and the portion along Sequassen Street measuring 110 feet by 47 feet in plan. The building originally accommodated storage, shipping, and receiving, with a clubhouse and cafeteria in the portion along Sequassen Street. The interior structural system uses exposed reinforced concrete mushroom columns. Open warehouse space has been divided into classrooms and offices on each side of a corridor.

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Office Building N, 1942, 17 Van Dyke Avenue (Contributing): The two-story flat-roofed brick Art Moderne office building (Photograph 14), a replacement for the original Italianate Colt Fire Arms Company offices, is U-shaped in plan with the opening facing south toward Sequassen Street. It measures 110 feet by 170 feet in overall plan. The windows form nearly continuous bands around the building. The entrance is on the east or Van Dyke Avenue side with a blocky projection that rises a little higher than the roof. Other notable features include a flagstaff above the entrance and pipe railings around the roof on the north part of the building. The interior has an open floor plan with enclosed offices along Van Dyke Avenue. The interior space has not significantly been altered since the building's use by the Colt Fire Arms Company. The building is currently vacant.

Altogether, the Colt industrial complex counts as ten contributing buildings.

Worker Housing

Colt Worker Houses, 101, 111, 121, 133, 141 Huyshope Avenue, 1856 (Contributing): Each of these five houses (Photographs 15 and 16) is of the same design and is in comparable condition. The gable-roofed main block of the building, which is of brick construction, is three stories high, with a one-bay flat-roofed two-story portion appended to the west elevation. The houses measure 32 feet by 36 feet in plan. The main axis of each building is perpendicular to the street, with the entrance in the center of the three-bay south elevation. The doorway is sheltered by a small gable roofed porch hood supported on large brackets with turned pendants. Window openings have corbelled hoodmolds; the sash is modern. The roof forms a peak over the middle bay of the south elevation, where the third-floor window is round-arched in shape. Scalloped bargeboard embellishes both the peak and the end gables. Two large brick chimneys emerge from the ridge of the roof. Originally six-family houses, the buildings are now condominiums. The buildings are counted as five contributing buildings.

Colt Worker Houses, 60, 64, 68, 72, 76 Van Block Avenue, 1856 (Contributing): Each of these five houses (Photograph 17) is of the same design and is in comparable condition. The brick buildings are four stories high shallow-hipped (nearly flat) roofs and broad projecting cornices on all four sides. The houses measure 40 feet by 160 feet in plan. The main entrances are on the north side elevation under a shed-roof canopy. The west elevations, facing Van Block Avenue, have four tiers of evenly spaced windows. Windows on the top floor are about half the height of those on the lower three floors, giving the appearance of "eyebrow" windows. The side elevations are four bays wide. There is a three-story enclosed porch centered on the south (rear) elevation of each building. Sashes are modern. A single brick chimney emerges from the nearly flat roof. Originally eight-family houses, the buildings are now condominiums. The buildings are counted as five contributing buildings.

"Potsdam" Worker Houses, 13, 17, 21, 23, 29, 33, 37, 41, 45 Curcombe Street, 1859. Samuel Colt originally built 10 "Potsdam" houses to house workers at his willow ware factory. Nine of these remain (Photograph 18). When they were built, the houses were called "Swiss cottages," in reference to fanciful architectural ornamentation, which today is referred to as Carpenter Gothic. Each house is two stories high, with a shallow-pitched gable roof and broad overhangs, and measures 22 feet by 30 feet in plan, with the gable end facing the street. They are two bays wide and three bays deep. Originally, all had exposed timber frames on the first floor with brick in-fill. Second floors were sheathed with vertical board-and-batten wood siding with shaped battens. Flat boards with diamond shaped tails, suggestive of fleurs-de-lis, lined the broad overhang at each gable end with large scroll-sawn boards at the apex and pendants at the eaves. Windows were surmounted by scroll-sawn head casings. Originally, the entrance to each cottage was on the southwest (right) side and historic photos suggest that all had small board and batten covered rooms projecting from the second floor above the porch,

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similar to what survives on #45 Curcombe St.. The Colt willowware factory, built in 1859 and destroyed by fire in 1873, stood just behind the Potsdam cottages on Warwarne Avenue and shared many of their architectural embellishments. The cottages were built as two family dwellings. Colt also four larger tenements facing Warwarne Avenue and a boarding house on Hendricxsen Avenue on the same block but they all disappeared by the 1930s. The Colt Company divested itself of all worker housing during the first decade of the 20th century. By 1909, the Potsdam cottages on Curcombe Street are shown belonging to Thomas Curry. Sometime after that, the cottages were purchased by individual owners. Consequently, each house is now in a somewhat different condition, having undergone various modifications.

13 Curcombe Street. Now a single family house. The front (north elevation) is two bays wide, with the entrance on the right (made over from a window). The original exterior siding has been replaced or obscured with composition-shingle siding. Other modernizations include replaced cornice moldings with partial returns, a hipped-roofed porch across the front, and a single wide three-part window on the first story. Because it retains its distinctive form, and despite the integrity issues raised by the siding and other alterations, it is counted as a contributing building.

17 Curcombe Street. Now a single family house. The front (north elevation) is two bays wide, with the entrance on the right (made over from a window). The half timbering and brickwork remaining exposed on the first-floor exterior is brick, and the second story is still covered with narrow board-and-batten siding, the bottoms of which are shaped into points. Window openings have scroll-sawn crestings above the lintel and are fitted with six-over-six sash. There is a pronounced overhang to the roof at the eaves and gable, the latter of which is embellished with fleur-de-lis bargeboard, scroll-sawn pendants at the power corners, and in the peak, a scroll-sawn pendant and finial. The doorway is sheltered by a 20th-century Colonial-style pedimented entry porch. The house is counted as a contributing building; a mid-20th-century garage is counted as a noncontributing building.

21 Curcombe Street. The house is a two-family dwelling. The fenestration has been altered so that the front (north elevation) is three bays wide, with the entrance in an added enclosed two-story porch along the right side. Other alterations include modern windows, aluminum or vinyl siding on the entire exterior, and removal of the roof's overhangs, bargeboard, and other architectural detail. The house originally shared the Carpenter Gothic embellishment found on many of its neighbors. Because it is still recognizable as part of a row of once-identical houses, it is counted as a contributing building; a mid-20th-century garage is counted as a noncontributing building.

25 Curcombe Street. The house is a two-family dwelling. The entrance is in an added enclosed two-story porch along the right side. The first-floor exterior is brick, with inset half-timbering in a rectilinear pattern. The second story is covered with narrow board-and-batten siding, the bottoms of which are shaped into points. Window openings have scroll-sawn crestings above the lintel and are fitted with two-over-two sash. The bargeboard and other roof detail have been removed, and on the first story one window has been built out to form a shed-roofed bay window. The house is counted as a contributing building; a mid-20th-century garage is counted as a noncontributing building.

29 Curcombe Street. The house is a two-family dwelling. The fenestration has been altered by creating a double window in place of the original single-window opening. Other alterations include an added enclosed two-story porch along the right side, modern windows, clapboarded exterior, and removal of the roof's overhangs, bargeboard, and other architectural detail. The house originally shared the Carpenter Gothic embellishment found on many of its neighbors. Because it is still recognizable as

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part of a row of once-identical houses, it is counted as a contributing building; a mid-20th-century garage is counted as a noncontributing building.

33 Curcombe Street. Now a single family house. The fenestration has been altered with a three-part window on the first story, conversion of the original entrance into a window, and three windows across the second story front. The principal entrance is on the side, sheltered by a shed-roof porch. Other alterations include aluminum or vinyl siding (in two colors and patterns, preserving the break between first and second levels and vertical orientation, echoing the original board and batten siding). All windows are modern replacements. The original roof overhang, bargeboard, and central pendant are in place, but the central finial and end pendants are not. The house is counted as a contributing building; a mid-20th-century garage is counted as a noncontributing building.

37 Curcombe Street. Now a single family house. The entrance is within an added two-story enclosed porch appended to the west side. The exterior is covered with brick-pattern asphalt siding. There is a pronounced overhang to the roof at the eaves and gable, the latter of which is embellished with fleur-de-lis bargeboard survives but the scroll-sawn pendants and finial are missing. The house is counted as a contributing building; a mid-20th-century garage is counted as a noncontributing building.

41 Curcombe Street. Now a single family house. The entrance is within an added enclosed porch appended to the west side. The first-floor exterior is brick, with inset half-timbering in a rectilinear pattern. Window openings lack their original scroll-sawn crestings but retain the six-over-six sash. Fleur-de-lis bargeboard survives, but the scroll-sawn pendants and finial are missing. The house is counted as a contributing building; a mid-20th-century garage is counted as a noncontributing building.

45 Curcombe Street. This house and it next door neighbor (#41) are among the most intact of the Potsdam cottages. The house remains a two-family dwelling. The entrance is on the west side, within a remnant of the original outside stair porch. The first-floor exterior is brick, with inset half-timbering in a rectilinear pattern. The second story is covered with narrow board-and-batten siding, the bottoms of which are shaped into points. Window openings have scroll-sawn crestings and are fitted with six-over-six sash. There is a pronounced overhang to the roof at the eaves and gable, the latter of which is embellished with fleur-de-lis bargeboard; the original scroll-sawn pendants and finial are now missing. The house is counted as a contributing building.

Altogether, the "Potsdam" houses are counted as nine contributing buildings and the garages as seven noncontributing buildings.

Armsmear (Samuel Colt House), 1857, 50-90 Wethersfield Avenue, attributed to Hartford architect Octavius Jordan (Contributing): Armsmear (Photographs 19 and 20), designed in the Italianate style, consists of an irregular plan of two and three-story blocks with low hip roofs, to which are appended various projections and towers. The house is of brick construction, with a smooth stuccoed exterior (early photographs show that the stucco was originally scored in imitation of ashlar masonry). From north to south, the major portions of the house include:

Main Section 30 feet by 58 feet with a large round-arched opening through the first story, creating a porte-cochere that once led to the carriage house that stands just to the east of the main house, flanked by two three-story, square-plan towers. The second story above the passageway features French doors set within a large arched opening, leading out onto a balcony defined by a wrought-iron lattice railing that connects the two

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towers. Above the doors is a parapet with complex curves. Replicas of the Uffizi dogs originally placed there by the Colts still guard the entrance.

Two-story section 39 feet by 42 feet.

Three-story section 49 feet by 94 feet with a small gable set into the front of the roof and a five-story square-tower at the southwest corner. The fourth story of the tower has a group of three small arched windows, with the fifth story a smaller stage with a single round-arched window on each face.

Two-story flat-roofed brick addition 35 feet by 107 feet built in 1910 (Benjamin Wistar Morris, architect) to house the home's residents; it is connected to the older portion of the house by a 32 feet by 39 feet connector. The addition echoes some of the features of the older house with its bracketed cornice and wrought-iron second-story balconies.

Overall the house is 197 feet by 107 in plan, including the addition. The rear of the house originally included a tower at the northeast corner surmounted by a wrought-iron and glass onion-shaped dome, a large conservatory that extended across much of the back of the house and featured several smaller domes, and an open porch that extended around the north side of the building. These features, which opened up to numerous landscape plantings, water features, and installations of sculpture are no longer in place. These landscape features evolved during the tenure of Samuel and Elizabeth Colt at Armsmear between 1857 and Elizabeth Colt's death in 1905.

At that point, the City of Hartford was bequeathed the grounds and turned them into a municipal park, which soon was turned into athletic fields.

There are several kinds of windows on the original part of Armsmear. Those on the first story are generally rectangular, with curved-top brownstone lintels carried on small consoles. Upper-story windows are mostly round-arched in shape, with prominent brownstone hoodmolds. All the cornices are defined by a prominent frieze molding, above which are ornate brackets spaced along the overhanging eaves.

Armsmear was the home of Samuel and Elizabeth Colt and their children. After Samuel Colt's death, Richard Jarvis, Elizabeth Colt's brother and president of the company, also lived at Armsmear. In her will Elizabeth Colt specified that Armsmear was to become a home for the widows of Episcopalian clergymen and other women of "good Christian character" but limited means. Armsmear continues to serve this function. Although the use of the building as a retirement home resulted in many modifications to the interior, such as the construction of offices and a chapel, a few of the first-floor areas are preserved almost exactly as Elizabeth Colt left them, particularly the library (Photograph 21), with its elaborately carved furniture, mantel, mirrors, and shelves filled with books and objects collected by the Colts. Original interior features are scattered throughout the various rooms. The skylight and outline of Elizabeth Colt's art gallery is still apparent. The two upper rooms of the tower have the original gas fixtures, a fresco painting, and wall treatments. Armsmear is counted as one contributing building.

The Armsmear property also includes the following buildings added by the Trustees of the Colt Bequest after receiving the original building under Elizabeth Colt's will:

Jarvis Hall, 1928, Brooks and Glazier, architects (Non-Contributing): Jarvis Hall is a two-story flat-roofed brick residence building completed for the residents of Armsmear. It measure 50 feet by 100 feet in plan. The south elevation features a central pedimented projection. Jarvis Hall is counted as a noncontributing building because it was built after the occupancy of Armsmear by the Colt family.

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Residence Halls, 1960, 1967 (Non-Contributing): Both are two stories in height and of brick construction. The earlier one measures 78 feet by 32 feet in plan, and the later one measures 100 feet by 57 feet in plan. The residences are counted as two noncontributing buildings because they were built after the period of significance for the Coltsville Historic District.

Colt Park Buildings, 130 Wethersfield Avenue. The buildings in Colt Park are of two types: those associated with the Colt estate during the occupancy of Samuel and Elizabeth Colt, and those constructed to support municipal park operations after the latter's death. All are listed here under the Wethersfield Avenue entrance to the park, at 130 Wethersfield Avenue:

Colt Carriage House, ca. 1860 (Contributing): The carriage house (Photograph 22) is of brick construction with a shallow-pitched hip roof interrupted by gabled projections. The wall surfaces feature recessed arches, with round arches in the center bay and flattened round arches in the side bays. The west elevation, the side facing Armsmear, has a pair of round-arched doorways in the center bay, flanked by small circular windows in the side bays. The second floor window openings are square, with a small circular window within the gable over the center bay. The south side elevation is also divided into three bays, with small square windows on the first story and a double-door loft opening on the second. The carriage house is extended to the east by a wing, possibly representing an enlargement of the carriage house sometime after its original construction. The wing is detailed in exactly the same manner, except that in the center bay of the south elevation there is a large arched opening fitted with double paneled doors. The building measures 43 feet by 51 feet in plan overall, with a large one-story 20th-century addition appended to the north side. The building, which is now in use for park storage, originally had a large cupola. Many original interior features survive, including horse stalls. The carriage house is counted as a contributing building.

Colt Gardener's Cottage, ca. 1860 (Contributing): Located at the rear of Armsmear, the Carpenter Gothic house (Photograph 23) is of brick construction and is 2 1/2 stories high. It has an L-shaped plan, 27 feet by 33 feet overall, with a 20th-century porch added to the east side elevation and a 20th-century ell at the rear. The entrance is in the angle formed by the L, under a now-enclosed shed-roofed porch. The window arrangement on each elevation is the same: paired rectangular windows on the first story, paired pointed-arch windows on the second story, and a single small pointed-arch, almost triangular, window for the attic story. All windows are outlined by wooden hoodmolds. The gables have a complex bargeboard arrangement consisting of a serpentine shape at the lower corners, long vertical braces with pendants, and a large central arch bearing on the braces. The area in between the arch and the peak of the roof forms a trefoil opening. Originally a residence for Colt domestic employees, the building is now used for park programs. The cottage is counted as a contributing building.

Colt Park Office, 25 Stonington Street, 1937, Russell F. Barker, architect (Non-Contributing): The former park office (Photograph 24) is of brick construction, 2 1/2 stories high, with the ridge of its gable roof set parallel to the street. It measures 28 feet by 37 feet in plan. Colonial Revival-style detailing includes six-over-six sash, soldier-course jack arches with cast-stone keyblocks and end voussoirs over the first-floor windows, and an open-soffit portico sheltering the entrance, which is the center of the five-bay facade. Plywood exterior siding completely encloses the portico. A one-story breezeway and one-car garage on the east side have also been enclosed. Originally built as a residence for park employees, the former office is now in use as a gallery that sells Connecticut-made arts and crafts. The office is counted as a noncontributing building.

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Pool and Lavatory Building, ca. 1935 (Non-Contributing): Adjacent to the Colt Park pool, this long (194 feet), one-story, Colonial Revival, gable-roofed building (Photograph 25), now closed, originally provided locker and lavatory facilities for the swimmers. In addition to the long center part of the building, there are 18 feet by 49 feet pavilions at either end. It is counted as a noncontributing building.

Park Maintenance Buildings, ca. 1940 (Non-Contributing): The maintenance complex (Photograph 25) consists of a large two-story brick building, U-shaped in plan, with garage openings on the first story, and three smaller detached buildings. The maintenance complex is counted as four noncontributing buildings.

Park Concession Building, ca. 1960 (Non-Contributing): The concession building (Photograph 26) is a one-story, flat-roofed brick building, measuring 48 feet by 50 feet in plan, of no particular architectural style. As the openings have been blocked up, it appears to be in use for storage. It is counted as one noncontributing building.

James B. Colt House, 154 Wethersfield Avenue, 1856, attributed to Hartford architect Octavius Jordan (Contributing): The Italianate house (Photograph 27) is of brick construction with a stuccoed exterior (the original treatment), three stories high, with a nearly flat hip roof. It measures 42 feet by 67 feet in plan. The south half of the west elevation, facing Wethersfield Avenue, projects forward about nine feet and has a semi-hexagonal bay window with a bracketed cornice on the first story. The north corner is treated as a square-plan hip-roofed tower of somewhat less projection. Across the north half of the front and extending around the north side of the house, is a flat-roofed porch featuring large cornice brackets and round-arched openings springing from square paneled columns; there is no railing. A similar porch runs along the south side of the house. There is a great variety to the windows, including round-arched windows, single and paired, and some with arched hoodmolds on consoles; single and paired windows with shallow triangular pediments on consoles; and segmental-arched third-story windows. The building's main cornice is defined by a belt molding, above which are widely spaced, curved brackets with pendants supporting the wide projection of the eaves. The house is counted as a contributing building.

180 Wethersfield Avenue, ca. 1885. Built by Elizabeth Colt to house senior managers of the armory (Contributing): The hip-roofed Queen Anne Style brick house (Photograph 28) is 2 ½ stories high and measures about 41 feet by 53 feet in plan overall. The southwest front corner projects forward to form a shallow gable-roofed 2 ½-story ell, which is dominated by a large brick exterior chimney centered on its front wall. A one-story porch extends across the rest of the facade and continues along the north side of the house, where it encounters another shallow ell. The porch features turned posts and a pediment over the entrance the face of which is covered with board-and-batten siding. The porch railing, originally of turned balusters, has been enclosed. There are three small windows on the second story of the facade. There is a semi-hexagonal two-story bay appended to the south elevation, and on the north side of the house, a gable-roofed dormer for the attic story. Windows have six-over-one sash. A second large chimney emerges from the south slope of the steeply pitched roof. The building was originally a single-family home owned by Elizabeth Colt during her lifetime and rented to high-level employees. At one time, the superintendent of the armory lived in the house. It now is now in use as offices. The house is counted as a contributing building.

184 Wethersfield Avenue, ca. 1885 (Contributing): Built by Elizabeth Colt to house senior managers of the armory. The hip-roofed Queen Anne Style brick house (Photograph 29) is 2 ½ stories high and measures about 47 feet by 58 feet in plan overall. The southwest front corner projects forward to form a large octagonal-plan two-story ell, with a tall paneled exterior chimney partly set within its front wall. A one-story hip-roofed

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porch extends across the rest of the facade, with two windows on the second story. The porch features turned posts, a railing of turned balusters, a stickwork frieze of two tiers square openings, and a steeply-pitched gable or pediment over the entranceway finished with a series of diagonal boards. Each slope of the steep roof has a hip-roofed dormer accommodating a pair of small windows. Windows have small clear border panes in the upper sash. A second large chimney rises along the north side. The building was originally a single-family home owned by Elizabeth Colt during her lifetime and rented to high-level employees; at one time, the rector of the Church of the Good Shepherd lived in the house. It now is used as offices. The house is counted as a contributing building; a mid-20th-century garage is counted as a noncontributing building.

Church of the Good Shepherd, 155 Wyllys Street, 1869, Edward Tuckerman Potter, architect (Contributing): The Gothic Revival church (Photograph 30) is of random-ashlar brownstone construction, with elaborate carved stone details and stained-glass windows. The church measures 54 feet by 124 feet overall. The plan is of the center nave-side aisles-apse type, with the ridge of the gable roof oriented in an east-west direction. A tall step-buttressed tower surmounted by a soaring stone spire rises at the northwest corner, with an entrance at its base recessed within an arched opening. There is another entrance in the gable-roofed ell that extends from the south side near the southwest corner. The steeply pitched gable roofs are covered with polychrome slates forming quatre-foil and zig-zag designs. Windows are mostly blunt-pointed-arch in shape, with lighter sandstone banding outlining the arched opening. The west end of the church features a single large pointed-arch opening divided into two trefoil-arch windows and an eight-lobed rose window. The corners of the church feature slate-coped buttresses. The stained glass windows were produced by Henry E. Sharp and Son, of New York. The interior features elaborate stone carvings, a marble baptismal font with the figures of three children, and a brass and gilt lectern. Stonework surrounding the "Armorer's Door," on the south side of the church facing Colt's manufacturing complex, is embellished with carvings of revolver parts (Photograph 31). Revolver cylinders, frames, priming nipples, and bullet molds are carved as decorative rosettes surrounding crosses on either side of the door. Column capitals are supported by up-ended pistols, their barrels lashed to the column with carved stone rope, their grips supporting stylized foliage. The church is counted as a contributing building.

Caldwell Hart Colt Memorial Parish House, 155 Wyllys Street, 1896, Edward Tuckerman Potter, architect (Contributing): The three-story Late Gothic Revival parish house (Photograph 32), measuring 105 feet by 70 feet in plan, is of random-ashlar brownstone construction and features banded arches like those on the church. The ridge of the complex gable roof is set in an east-west orientation, with the main entrances on the north elevation, to either side of a large recessed arch; huge granite medieval columns support a second-story porch over the center portion of the building. The second story is a continuous arcade of arches of medieval columns, with several different types of granite and marble in evidence. The third story is dominated by a large arched projection, like a small dormer, which continues the banded arch motif. The roof is covered with bands of different colored slates, and four large compound chimneys are set at the four corners of the center part of the building. The interior is largely original, with marble columns, carved and decorated sandstone, stained glass, and banded arches at every turn and dark-stained woodwork. The second floor is mostly undivided space, open to exposed iron trusses that brace the walls and roof. Stonework, both inside and out, is decorated with elaborate carvings in nautical motifs, reflecting Caldwell Colt's passion for yachting (Photograph 33). The parish house is counted as a contributing building.

To the rear of the parish house there is a free-standing, one-story brick annex (ca. 1975), currently in use for daycare, which is counted as a noncontributing building because it was built after the period of significance.

Individual Descriptions—Object:

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Samuel Colt Monument, Colt Park, Wethersfield Avenue entrance, 1906, J. Massey Rhind, sculptor, Gorham Manufacturing Company, bronze foundry (Contributing): The Samuel Colt monument (Photograph 34) was commissioned by Elizabeth Colt in 1902. It features a gray granite base of five low steps, with two stone benches; a tall central pink-granite pedestal surmounted by a bronze statue of the standing Samuel Colt in a triumphant posture, facing west; two side panels with large low-relief bronzes; and a second bronze figure depicting Colt as a seated young mariner carving a revolver out of wood. The figures are somewhat larger than life-sized. The pedestal is inscribed with Colt's name and dates and several lines of dedication. The base of the statue is carved with laurel-leaf and cornucopia motifs, and carvings on the ends of the side sections depict flaming torches. One bronze relief depicts Colt's reception at the court of the Russian Czar in 1854; the other relief depicts his address on the subject of the mechanized manufacture of firearms before the British Institute of Civil Engineers in 1851. The Samuel Colt Monument is counted as one contributing object.

Individual Descriptions—Site:

Colt Park, 130 Wethersfield Avenue, 105 acres, bounded west by Wethersfield Avenue, south by Warwarme Avenue, and Curcombe Street, east by Hendricxsen and Van Block Avenues, and north by Stonington Street (Contributing): Colt Park (Photograph 35) was originally the grounds of Armsmear, the Colt estate, and was conveyed to the city of Hartford as a bequest of Elizabeth Colt. Removal of statuary, drives, ornamental ponds, and special plantings, as well as the installation of playing fields and recreational facilities, began immediately after the death of Elizabeth Colt in 1905 under the direction of Theodore Wirth, Hartford's Superintendent of Parks.³ Surviving Colt-related buildings have been enumerated above.

The first athletic fields were in place by 1909. Current recreational facilities include an oval running track, soccer and baseball fields, an outdoor hockey rink, a space-frame-roofed open pavilion intended for outdoors concerts, and a large public pool that dates from the 1930s. Dillon Stadium, administratively part of Colt Park, lies outside the boundary of the proposed designation.

Colt Park includes broad open areas of grass that are not dedicated to specific activities, and the area closest to Armsmear, at the Wethersfield Avenue entrance, is lightly wooded. A remnant of an allée of American lindens, along a former drive leading to the Colt Carriage House, survives from the early landscaping of the estate (Photograph 36). Since the view across these open areas resembles the view that existed during the period of significance, the park is counted a one contributing site.

Individual Descriptions--Structures:

Colt Dike (remnant), Warwarme Avenue between Wethersfield Avenue and Curcombe Street; Van Dyke Avenue between Warwarme Avenue and Vredendale Avenue, 1854 (Contributing): Broad earthen embankment with sloped sides and a paved roadway along the top (roadways were present from the time of the dike's construction), rising up to fifteen feet above the surrounding land (Photograph 37). Partially completed at the time of the Freshet of 1854, the embankment was raised another nine feet that year. The Colt Dike enclosed the low-lying areas occupied by Colt Park, the factory, and the Church of the Good Shepherd, protecting the area from the Connecticut River's periodic floods. Hartford's flood control system was extended and completely rebuilt by the U.S. Engineers in the early 1940s, using a combination of concrete walls and earthen embankments. Just to the east of the dike on Van Dyke Avenue, Interstate-91 was constructed during the 1960s, blocking off the river from the original dike. The remnant of the Colt Dike is counted as a contributing structure.

³ Theodore Wirth's son Conrad was a longtime Director of the National Park Service.

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Colt Park Pavilion and Features, 130 Wethersfield Avenue (Non-Contributing). Structures within Colt Park reflect its use as a public recreational facility. A ca.1980 space-frame-roofed open pavilion (Photograph 38) is counted as a noncontributing structure, and the recreational facilities (track, pool, hockey rink, and athletic fields) are counted as a four non-contributing structures.

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8. STATEMENT OF SIGNIFICANCE

Certifying official has considered the significance of this property in relation to other properties:
 Nationally: X Statewide: Locally:

Applicable National
 Register Criteria:

A X B C X D

Criteria Considerations
 (Exceptions):

A X B C D E F G

NHL Criteria:

1 and 5

NHL Theme(s):

V. Developing the American Economy:
 1. extraction and production
 2. distribution and consumption
 VI. Expanding Science and Technology
 2. technological applications
 VIII. Changing Role of the United States in the World Community
 2. commerce

Areas of Significance:

Industry
 Invention

Period(s) of Significance:

1855-1945

Significant Dates:

1855, 1867, 1916

Significant Person(s):

Samuel Colt

Cultural Affiliation:

Architect/Builder:

Edward Tuckerman Potter (Church of the Good Shepherd and Caldwell Colt
 Parish House)
 Octavius Jordan (Armsmear)
 Robert M. Copeland and H.W.S. Cleveland, landscape architects (Armsmear
 grounds)

Historic Contexts:

XII. Business
 J. Defense
 XVIII. Technology (Engineering and Invention)
 E. Military (Fortifications, Weapons, and War Vehicles)

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State Significance of Property, and Justify Criteria, Criteria Considerations, and Areas and Periods of Significance Noted Above.**Summary Statement**

The Coltsville Historic District in Hartford, CT, is nationally significant because its resources illustrate important contributions to the development of the American economy and the improvements in manufacturing technology made by Samuel Colt (1814-1862) and the industrial enterprise he founded, Colt's Patent Fire Arms Manufacturing Company (hereafter referred to as Colt Fire Arms Company). Colt is renowned for developing an efficacious revolver design, revolutionizing personal firearms by eliminating the need to reload until five or six shots had been expended. His company drew upon the technological innovations of the firearms industry in New England to achieve an unprecedented level of mechanization and production. The Colt Fire Arms Company was a highly influential national source of innovation in precision manufacturing and firearms design well into the 20th century. The ultimate success of Samuel Colt's enterprise was due to his being a trail-blazing innovator in business organization and marketing, characteristics of the company that lasted long after his death.

As an entrepreneur, Colt put into place essential ingredients of the American manufacturing system: an innovative product, advanced manufacturing techniques, thorough mechanization, large-quantity production, successful marketing and distribution, and adept use of patents. Between Colt's death in 1862 and the 1920s, the Colt Fire Arms Company attracted some of the most innovative talents in firearms manufacturing. Richard Gatling, John Browning, and John T. Thompson, inventors who gave their names to machine guns, were associated with the company. During both World War I and World War II, the Colt Fire Arms Company was one of the nation's leading small-arms producers.

The expansion of the Samuel Colt Home (Armsmear) National Historic Landmark (NHL) designation to include the Coltsville Historic District is appropriate because it not only tells the story of this important industrial enterprise, but it is an example of a planned industrial district, with reclaimed land, huge factory buildings, worker housing, and social and religious buildings. The larger landmark district recalls the contributions of the thousands of Colt workers whose labor sustained the company by including the factory buildings in which they worked and the homes in which large numbers of Colt workers lived. The expanded listing also better recognizes Elizabeth Hart Jarvis Colt (1826-1905), who led the company for almost forty years after her husband's death. Elizabeth Colt is important because she was responsible for deciding to rebuild the armory following the disastrous fire of 1864, she was in charge of the company when several key developments occurred (such as the Colt double-action revolvers and the association with inventor John Browning), and she endowed the area with the church, parish house, and public park.

Coltsville Historic District and National Historic Landmark Criteria

This National Historic Landmark nomination for the Coltsville Historic District expands upon the 1966 NHL designation of the Samuel Colt Home (Armsmear). Armsmear was designated an NHL based on its being the home of revolver inventor Samuel Colt. This nomination argues that the Armsmear NHL designation should be expanded to include the factory complex where the guns were manufactured as well as including other contributing structures in the industrial community planned by Samuel Colt and expanded under the direction of his widow, Elizabeth Colt. The expanded NHL would allow the complete story of the Colt Fire Arms Company to be told, including periods of innovation and growth after Samuel Colt's death in 1862. It should also be noted that the Colt Industrial District, which includes the factory buildings and worker housing, was nominated to and listed on the National Register of Historic Places in 1976, with a recommendation that the district be considered

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nationally significant.

The Coltsville Historic District is nationally significant based upon two NHL criteria:

(1) That the Coltsville Historic District is associated with events that have made a significant contribution to, and are identified with, or that outstandingly represents, the broad national patterns of United States history and from which an understanding and appreciation of those patterns may be gained;

(5) That the Coltsville Historic District is composed of integral parts of the environment ... [that] collectively compose an entity of exceptional historic or artistic significance, or outstandingly commemorate or illustrate a way of life or culture.

Coltsville meets NHL Criterion 1 because it is the site of manufacturing and business developments which made significant contributions to broad national patterns of United States history. Coltsville meets NHL Criterion 5 because it is a notable planned industrial district that outstandingly illustrates the linked assemblage of factories, worker housing, managerial housing, community structures, civic amenities, and landscapes that characterized important aspects of American industrial development.

Coltsville is a recognizable district of the city of Hartford, CT, located just south of the downtown. With few exceptions, which are identified as noncontributing resources, the properties within the proposed boundary were built by Samuel and Elizabeth Colt or by the industrial enterprise they founded and led. Each of the properties contributes to the integrity of the district.

The Armsmear NHL anchors the west side of the Coltsville Historic District. The mansion symbolized Samuel and Elizabeth Colt's business achievements and the exalted social status that they derived from those achievements. Armsmear was intentionally sited to have a view over the estate's landscaped grounds toward the firearms factory by the Connecticut River. This vista remains in place today. Inclusion of the Colt Fire Arms factory complex permits interpretation of the company that Samuel created and that Elizabeth carried on. The factory complex provides opportunities to interpret manufacturing processes as well as the lives and contributions of the managers and workers who worked at the plant. The existence of 10 of 20 original company-built worker housing tenements in addition to nine of the original "Potsdam cottages" planned by Samuel Colt demonstrates how Coltsville functioned as a factory village within a growing city. James Colt's mansion provides an example of how another manager lived in Coltsville. The Church of the Good Shepherd, Caldwell Colt Memorial Parish Hall, and the Colt Memorial in Colt Park demonstrate Elizabeth Colt's civic leadership in providing social institutions for workers, the philanthropy made possible by industry-based wealth, and the tendency to celebrate captains of industry. Individual elements of Coltsville, such as the worker housing or the Church of the Good Shepherd "share in the collective association with a nationally significant event, movement, or broad pattern of national development."⁴

Period of Significance for Coltsville

The period of significance for the Coltsville NHL nomination lasts from 1855 until 1945. The period of significance for Coltsville extends for nearly a century, during which the Colt Company devised innovative firearm designs and advanced precision manufacturing technology and maintained a major share of the national market for firearms. It is important to carry the period of significance into the 20th century because the Colt

⁴ *How to Prepare National Historic Landmark Nominations* (Washington, DC: National Park Service, 1999), p.

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Company played a major role in the rearmament for World War I and World War II. Not only did the Colt Fire Arms Company itself produce hundreds of thousands of sidearms and machine guns vital to both war efforts, but the machine tool-based industrial sector that grew out of the firearms industry was instrumental in enabling the United States to achieve exceptional levels of materiel production.

The period of significance concludes with the end of World War II, when the company began to decline. In 1955, it became the Colt Firearms Division of an industrial conglomerate—Penn-Texas, later Fairbanks-Whitney. The corporate conglomerate sold the Coltsville plant, but later leased back some space until 1993. The company still manufactures handguns, shoulder arms, and automatic weapons at its plant in West Hartford, CT.

The period of significance 1855-1945 is supported by the survival of substantial portions of the factory complex, including the most visible and dramatic building—the East Armory, with its signature blue onion dome. The year 1855 marks Samuel Colt's construction of the first armory complex. The purpose-built armory using state-of-the-art technology embodied Samuel Colt's vision for firearms production on an unprecedented scale. Much of the factory burned in 1864. Two original buildings used by Elisha Root for his innovative forging technology (interior illustrated in 1880 U.S. Census *Report of Manufactures*) survived and still stand. The East Armory, which was rebuilt with the signature blue onion dome, still stands. The East Armory was the main building for firearms manufacturing until World War I, when the reinforced concrete South and North Armories were added. These World War I-era buildings, which still stand, mark the apex of the company's physical development. An office building erected in 1942 to accommodate World War II expansion also remains.

The integrated Coltsville industrial community is interpreted by the Armsmear mansion and the extant worker housing, which were started by Samuel Colt in 1856. The Church of the Good Shepherd, Caldwell Colt Memorial Parish House, and Colt Park testify to the Coltsville vision and the philanthropy and civic leadership of Elizabeth Colt.

Coltsville and the National Historic Landmark Thematic Framework

The Coltsville Historic District has national significance related to two major themes and several sub-themes from the National Historic Landmarks Thematic Framework. Coltsville illustrates "Theme V: Developing the American Economy: production; and distribution and consumption" and "Theme VI: Expanding Science and Technology: technological applications." A sub-theme for the Colt Fire Arms Company relates to "Theme VIII: Changing Role of the United States in the World Community: commerce." The historic district also illustrates as the sub-theme "Developing the American Economy: workers and work culture."

The argument for nomination under "Developing the American Economy: production" is that large-scale manufacturing was a key component in the development of the American economy, that the Colt Fire Arms Company under Samuel and Elizabeth Colt and their successors played a pivotal role in advancing American manufacturing, and that Coltsville is representative of latter 19th-century and early 20th-century industrial districts. Relating to "Developing the American Economy: distribution and consumption," Colt handguns became important consumer products, as well as military arms, and their marketing and distribution played an important role in American society. The argument for nomination under "Expanding Science and Technology: technological applications" is that the Colt Fire Arms Company invented technologically-advanced products and developed precision manufacturing processes that influenced other industries during the second half of the 19th century.

A sub-theme for the Colt Fire Arms Company relates to "Theme VIII: Changing Role of the United States in

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the World Community: commerce.” In a general sense, the “American System of Manufacture,” as articulated by Samuel Colt at London’s Crystal Palace Exhibition in 1851 and implemented at his Hartford Armory starting in 1855, provided the basis for subsequent industrial expansion and allowed the United States to become a world power. The Colt Fire Arms Company was one of the first American manufacturing companies to have a significant presence abroad, with Samuel Colt opening a factory in London in 1853. In 1854, he was presented to the Czar and by the end of the year he was selling revolvers to both the Russians and their long-time adversaries the Turks. This prefigured the globalization of industry. Colt’s presentation on the “American System” influenced the British Parliament to institute the Small Arms Commission, which produced “The Report of the Committee on Machinery of the United States of America” (1855), which in turn led to creation of a new British armory at Enfield, England. This may have been the earliest example of technology transfer from the New World back to Europe. This theme “Changing Role of the United States in the World Community: commerce” also is illustrated by the Colt Fire Arms Company experience in World War I and World War II, during which it was a major international weapons supplier and a precursor of America’s global military-industrial complex.

The sub-theme of “Developing the American Economy: workers and work culture” is reflected in the fact that Coltsville tells the story of workers in precision manufacturing and explains their social life through worker housing and community institutions. It was manufacturing enterprises like the Colt Fire Arms Company that spurred urbanization, generated social mobility, and allowed the country to absorb millions of immigrants.

Coltsville enhances our appreciation of the branch of industrialization based in precision manufacturing, a class of industry that is under-represented in the current listing of national Historic landmarks. National Historic Landmarks such as the Old Slater Mill in Pawtucket, RI, the Harrisville mill village in Harrisville, NH, the Boston Manufacturing Company mills in Waltham, MA, the Lowell (MA) National Historic Park, the Lowell Locks and Canals Historic District, and the Cheney Brothers silk mills Historic District in Manchester, CT, illustrate textile manufacturing, a different branch of industrialization with distinct impacts on American life.

University of Massachusetts-Amherst historian Bruce Laurie has explained a distinction between the “First Industrial Revolution,” represented by the textile industry and Lowell, and the “Second Industrial Revolution,” represented by precision manufacturing and Coltsville and the Springfield Armory. Laurie has written:

The Second Industrial Revolution catapulted this nation to world leadership in technology and productivity, projecting it far beyond the capacity of the Lowells of America. No nation ever achieved sustained greatness on the First Industrial Revolution and none ever will; it was the Second Industrial Revolution that made this nation an industrial power.⁵

The Springfield Armory National Historic Site (NHS) (designated an NHL in 1960) in Springfield, MA, addresses the development of innovative manufacturing methods for producing firearms. However, the Springfield Armory was a government installation operating for military purposes and did not make contributions to business development or marketing. The Colt Fire Arms Company adapted and improved the Springfield Armory’s manufacturing techniques for private enterprise, marshaled them to produce an innovative consumer product, and passed those techniques on to other areas of manufacturing. Moreover, the Colt Company continued to develop innovative production methods and combine them with successful marketing strategies. The Colt Fire Arms Company developed a unique corporate brand unlike anything developed by the textile industry.

⁵ Bruce Laurie, “The Second Industrial Revolution,” Background Statement Prepared for Springfield Armory National Historic Site (Amherst, MA: University of Massachusetts-Amherst, History Department, January 3, 2005).

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There are other precision manufacturing sites, but they are different from Coltsville. The American Precision Museum in the Robbins & Lawrence Armory and Machine Shop (designated an NHL in 1966) in Windsor, VT, has a large collection of precision manufacturing equipment, but it does not focus on the broader business and social implications of manufacturing. The Eli Whitney Museum, in Hamden, CT, is mainly a technology education center and does little to interpret 19th-century manufacturing history. Other historic Northeastern firearms factories, such as the Winchester factory in New Haven, CT, the Simeon North factory in Middletown, CT, the Remington (formerly Union Metallic Cartridge Company) factory in Bridgeport, CT, and the original Smith & Wesson plant in Springfield, MA, have not been preserved to tell the story of precision manufacturing. All or most of the original 19th-century buildings have disappeared, and early 20th-century structures have been redeveloped for other uses. The Remington factory in Ilion, NY, still operates and maintains a Remington Arms Museum, although most of the surviving factory buildings were built around 1915-1916.

Another industrial NHL is the Great Falls of the Passaic/Society for Useful Manufacturers Historic District in Paterson, NJ. The Great Falls Historic District, started by Alexander Hamilton in 1791, is recognized primarily because it was the first American attempt to harness the entire power of a major river for industrial purposes. It has buildings that were used by the silk, railroad, and machine industries. Samuel Colt operated his first revolver factory there between 1836 and 1841. The building used by Colt in Paterson was burned in the 1980s and only its walls are currently standing. It was considered but rejected for NHL designation in the NPS “Commerce and Industry Theme Study” in 1966. Therefore, Coltsville best represents the contributions of Samuel Colt and the Colt Fire Arms Company.

The Invention and Adoption of the Colt Revolver

Samuel Colt was not the first person to conceive of a multiple-shot pistol using a revolving cylinder magazine, but he perfected the revolver to the point that it became a practical weapon.⁶ In 1836, Colt took out a patent, supplemented by an additional patent three years later, which established an effective monopoly on revolvers until 1857. Colt manufactured his first revolver at Paterson, NJ, in 1836. That enterprise failed by 1842 because of an insufficient market and a firearm design that was complicated and expensive to produce. Colt’s career as a gun manufacturer revived in 1847, when he received a contract from the U.S. Army to make revolvers for use in the Mexican War. Captain Samuel Walker of the Texas Rangers came to visit Samuel Colt in Hartford to suggest an improved revolver design. Colt fulfilled the first order by subcontracting with Eli Whitney’s factory in Hamden, CT. This contract provided him with the reputation and resources to establish his own pistol factory, first in rented space in Hartford in 1849 and at his own plant six years later.

Samuel Colt’s revolver first attained widespread notice when the Texas Rangers used it against Mexicans and Indians during the 1840s. According to historian Walter Prescott Webb’s *The Great Frontier*, Americans were able to occupy the Great Plains because of major technological innovations, with the revolver being “the first mechanical adaptation to the needs of the country.”⁷ Historian Robert M. Utley wrote: “On the utility of Colt’s product all agreed: a weapon that enabled a horseman to fire six shots without reloading had revolutionary implications.”⁸ The Colt revolver became so commonplace that lower-case “colt” “became a generic term for revolver.”⁹

⁶ Elisha Collier, of Boston, designed a flintlock revolver with a rotating chamber breech in 1818, but it had to be rotated manually. Colt developed a cocking hammer, which caused the chamber to rotate when it was cocked. Harold Evans, *They Made America, From The Steam Engine to the Search Engine: Two Centuries of Innovators* (New York: Little, Brown and Company, 2004), p. 61.

⁷ Walter Prescott Webb, *The Great Frontier* (Austin, Texas: University of Texas Press, 1964), p. 245.

⁸ Robert M. Utley, *Frontiersman in Blue: The United States Army and the Indian, 1866-1890* (New York: Macmillan

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Although historians argue that the West was not as violent as movies and television might suggest, the indisputable fact is that the Colt Fire Arms Company sold hundreds of thousands of revolvers both to the military and civilians. Most men on the Western frontier between the 1850s and the 1880s carried firearms, often a Colt revolver. Those who owned Colt revolvers included John Brown, Bat Masterson, Wyatt Earp, Billy the Kid, Jesse James, Wild Bill Hickock, and Theodore Roosevelt. Mark Twain carried a Colt Navy revolver during his sojourn in Nevada mining camps, remarking in *Roughing It* (1861) that he had “worn the thing in deference to popular sentiment, and in order that I might not, by its absence, be offensively conspicuous, and a subject of remark.”¹⁰ With so many Colt revolvers in circulation, they became an outsized symbol that has lasted into current times. Cultural historian John Cawelti, in *The Six-Gun Mystique*, wrote that the cowboy hero with his Colt six-gun “seemed to reaffirm the traditional image of masculine strength, honor, and moral violence.”¹¹

Colt firearms have used extensively by the United States military in all military conflicts since the Mexican War on. According to historian Paul A. Koistinen, “By the time of the Civil War, Ordnance Department arsenals had ceased making revolvers in favor of Colt’s patent pistols.”¹² During the Civil War, the United States government purchased 378,000 revolvers and 114,000 rifles from the Colt Fire Arms Company. Before the war started, Colt sold “hundreds of thousands of his weapons to the South *with a large discount*,” according to the *New York Times*.¹³

Precision Manufacturing

The argument for Coltsville’s national importance in industrialization is based upon longstanding scholarship among historians of economic and technological change, who argue that the firearms industry led the way in pursuing interchangeability of parts and mechanization of virtually all aspects of manufacturing. In 1976, Nathan Rosenberg wrote that “the making of firearms occupied a position of decisive importance in the development of specialized, precision machinery,” and identified the Colt Armory as the culmination of firearms manufacturing technology.¹⁴ In his inventory of Connecticut’s industrial heritage (1981), Matthew W. Roth wrote:

Samuel Colt and his armory claim a place of central importance in the nation’s history. . . . Colt’s manufacturing processes constitute a crucial episode in the development of metalworking technology. The work begun at Colt’s in the 1850s under superintendent E. K. Root drew from prior experience in production of textile machinery, firearms and consumer hardware to create a synthesis of technique that provided the basis for metalworking innovations into the 20th century.¹⁵

Eugene S. Ferguson, a leading historian of American technology, called the Colt armory “a showpiece of

Publishing Company, Inc., 1967), pp. 26-27.

⁹ Robert Hendrickson, *The Facts on File Encyclopedia of Word and Phrase Origins*, 3rd ed. (New York: Checkmark Books, 2004), p. 166.

¹⁰ Roger D. McGrath, *Gunfighters, Highwaymen, and Vigilantes: Violence on the Frontier* (Berkeley, CA: University of California Press, 1984), p. 5.

⁶ John Cawelti, *The Six-Gun Mystique*, 2nd ed. (Bowling Green, OH: Bowling Green University Popular Press, 1984), p. 86.

¹² Paul A. Koistinen, *Beating Plowshares into Swords: The Political Economy of American Warfare, 1606-1865* (Lawrence, KS: University of Kansas Press, 1996), p. 166.

¹³ “A Revolving Patriot,” *New York Times*, April 26, 1861.

¹⁴ Nathan Rosenberg, *Perspectives in Technology* (New York: Cambridge University Press, 1976), p. 19.

¹⁵ Matthew W. Roth, *Connecticut: An Inventory of Historic Engineering and Industrial Sites* (Washington, DC: Society for Industrial Archeology and Historic American Engineering Record, 1981), p. 50.

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mechanization.” The specialized machinery, especially Root’s drop presses, “found wide application in many other industries.”¹⁶ David Hounshell’s comprehensive account of American manufacturing, *From the American System to Mass Production: The Development of Manufacturing Technology in the United States*, identified the Colt armories in Hartford and London as “the prime showplaces of American manufacturing technology.”¹⁷

Samuel Colt’s armory became a leader in precision manufacturing because revolver parts required close tolerances and free-moving parts. If they were not made to precise specification, they could jam or even explode. Colt brought together a host of innovative manufacturing techniques that allowed the nearly complete mechanization and standardization of parts for firearms production.

The Colt Fire Arms Company was part of the precision manufacturing region in the Connecticut River Valley which developed the “American System of Manufacture” (most famous for machine production of standardized parts) that attracted so much attention in Europe in the mid-19th century. The so-called “Precision Valley,” stretching from New Haven, CT, through Hartford and Springfield to Windsor, VT, contained the most advanced manufacturers in America during the 19th century and into the 20th century. Colt’s production and quality control techniques incorporated “armory practices” developed at the Springfield Armory and such private factories as Robbins and Lawrence, Windsor, VT; Simeon North, Middletown, CT; and Eli Whitney, Hamden, CT. The synergy between gun makers and machine tool builders who supplied them with manufacturing equipment had ramifications far beyond firearms, shaping the development of typewriters, sewing machines, bicycles, automobiles, aircraft components. And other mass-produced precision mechanisms.

The National Park Service’s *Connecticut River Valley Special Reconnaissance Study* (1998) found that precision manufacturing created a distinctive, highly-advanced industrial region in the Connecticut River Valley:

Precision manufacturing is associated with a distinctive social and architectural landscape, paralleling but different from the complexes formed by the textile industry elsewhere in New England, or the heavy industry of Pennsylvania. The higher skill level and consequent higher earnings of many workers in the precision trades seems to have encouraged the development of more prosperous, stable communities. There was a prestige associated with arms-making, particularly in manufacturing the weapons used in national defense.¹⁸

Connecticut River Valley manufacturers constantly exchanged technological solutions and skilled workers. Developments in arms-making were adapted to manufacture other metal products, such as sewing machines,

¹⁶ Eugene S. Ferguson, “History and Historiography,” *Yankee Enterprise: The Rise of the American System of Manufactures*, ed. Otto Mayr and Robert C. Post (Washington, D.C.: Smithsonian Institution Press, 1981), pp. 3-4.

Ferguson explained that there was a distinction between “interchangeable parts” and “mechanized production.” Industry did not achieve complete interchangeability of parts until the 20th century. Ferguson explained: “Most of the parts of a Colt revolver were interchangeable, but the hand fitting in its final assembly was inevitable, given the practical impossibility of making at any reasonable cost parts that would fit very snugly and at the same time be interchangeable.” Ferguson, p. 4.

¹⁷ David Hounshell, *From the American System to Mass Production: The Development of Manufacturing Technology in the United States* (Baltimore: Johns Hopkins University Press, 1984), p. 49. Hounshell points out that “uniformity [or interchangeability of parts] would be an effect, not an absolute goal, of mechanization” and that Samuel Colt did not attain complete mechanization of manufacturing processes, since that goal was not cost-effective. Despite the fact that Colt workers filed and fitted certain gun parts during the manufacturing process, Hounshell argues that “The lack of interchangeability of revolver parts by no means precludes characterizing Colt’s production technology as embodying the American system of arms manufacture.”

¹⁸ National Park Service, *Connecticut River Valley Special Resource Reconnaissance Study* (Boston: National Park Service Northeast Region, 1998), p. 31.

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typewriters, bicycles, and even automobiles. William Hosley, in *Colt: The Making of an American Legend* (1996), wrote that the Connecticut River Valley's evolution into a "Precision Valley" in the 1850s occurred because of a "coalescence of creativity and capital that made the river towns of Connecticut, Massachusetts, Vermont, and New Hampshire what California's Silicon Valley is today, the vanguard of an internationally significant, technology-based transformation."¹⁹

The foremost technological innovator at the Colt factory was Elisha K. Root, who managed the manufacturing processes of the Colt factory between 1849 and his death in 1865. Root, who had originally developed advanced drop-forging techniques at the Collins ax factory in Collinsville, CT, was the model for the inventive genius in Mark Twain's *A Connecticut Yankee in King Arthur's Court*. Joseph Wickham Roe, in *English and American Tool Builders*, wrote of Elisha Root: "He invented the best form of drop hammer then in use, machines for boring, rifling, making cartridges, stock turning, splining, etc., and worked out the whole system of jigs, fixtures, tools, and gauges. The credit for the revolver belongs to Colt; for the way they were made, mainly to Root."²⁰

Elisha Root and Samuel Colt believed that every aspect of production could be mechanized to achieve the standardization of parts and the lowest cost of production. The Colt armory became known as the acme of precision manufacturing, in part because the Colt Company gave tours and arranged for favorable publicity. Mark Twain visited the armory in 1868 and wrote an admiring account:

It [Colt armory] comprises a great range of tall brick buildings, and on every floor is a dense wilderness of strange iron machines... a tangled forest of rods, bars, pulleys, wheels, and all the imaginable and unimaginable forms of mechanism... It must have required more brains to invent all those things than would serve to stock 50 Senates like ours.²¹

When the 1880 U.S. Census published a detailed report on the nation's firearms industry, the Colt armory was featured as a leader in precision manufacturing and pictures of several machines and views of the Colt armory were included in the Census report.²²

Another indicator of the Colt Company's leading role in manufacturing technology was its choice by the Russian government as manufacturer of rifles in the late 1860s. The Russian government chose to work with the Colt Fire Arms Company because of its superior manufacturing technology. The Russians arranged to have 30,000 Colt-Berdan rifles made at the Colt factory. The Russians also used Colt's Hartford factory as the model for the czar's own armory and tested their armory machinery in Hartford before shipping it to Russia.²³

The Colt Company played a major role in disseminating precision technology throughout American industry.

¹⁹ William Hosley, *Colt: The Making of an American Legend* (Amherst, MA: University of Massachusetts Press, 1996), p. 34. Business historian Michael Best provides a case study describing how the Connecticut Valley precision manufacturing district was the cradle of the "American System of Manufacture." Michael Best, *The New Competition: Institutions of Industrial Restructuring* (Cambridge, MA: Harvard University Press, 1990), pp. 29-45.

²⁰ Joseph Wickham Roe, *English and American Tool Builders* (New Haven: Yale University Press, 1916), p. 169.

²¹ Ellsworth S. Grant, *Yankee Dreamers and Doers: The Story of Connecticut Manufacturing* (Hartford: Connecticut Historical Society & Fenwick Productions, 1974), p. 245.

²² Charles H. Fitch, "Report on the Manufactures of Interchangeable Mechanism," U.S. Census Office, *Report of the Manufactures of the United States at the Tenth Census*, Washington, D.C.: Government Printing Office, 1883, pp. 611-645. The Census report described several Elisha Root innovations, including drop forging (four-fold screw-drop & crank-drop), edging or jigg machine, double turret lathe, and Colt chucking lathe.

²³ Joseph Bradley, *Guns for the Tsar* (DeKalb, IL: University of Northern Illinois Press, 1990), passim.

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Historian Merritt Roe Smith is one of several historians of technology who argue that technical innovations that were developed by firearms manufacturers, particularly the Colt Fire Arms Company, “spread to technically related industries and by the late 1850s could be found in factories making sewing machines, pocket watches, railroad equipment, wagons, and hand tools. From these beginnings it was only a matter of time before the new technology found applications in the production of typewriters, agricultural implements, bicycles, gramophones, cameras, automobiles, and a host of products associated with the mass production industries of the twentieth century.”²⁴ Hartford companies specialized in manufacturing sewing machines, typewriters, bicycles, automobiles, and machine tools. The precision manufacturing technology developed there spread to factories across the country during the latter 19th century.

Arms manufacture is a highly cyclical business. When the firearms business slowed at Colt’s, usually between wars, the company manufactured non-firearm products under its own brand name. It also manufactured products contracted for by other companies and rented space to other manufacturing businesses. Often these businesses drew upon the skilled workforce and technological innovations of the Colt Fire Arms plant. Most touted their manufacturing address as “Colt’s Armory” in their advertisements, trading on the company’s reputation for reliability and precision manufacture. The prototype for the 18,000-part Paige typesetter, which Mark Twain famously lost a fortune investing in, was made at the Colt factory. Successful Colt-made products included Baxter Portable steam engines; Noark electrical equipment, such as switchboxes; Morrison and Charter Oak sewing machines; Universal printing presses; Thorne’s typesetting machines; Federal adding machines; Charter Oak and Archimedean lawn mowers; Autosan commercial dishwashers; and Railway Alarm ticket punches for trains and streetcars. The Colt Plastics division, which operated between 1920 and 1955, manufactured firearm grips, electric plugs and outlets under the name “ColtRock,” buttons, costume jewelry, and other consumer products.²⁵

One of the methods that Samuel Colt used to promote innovation and manage workflow was to provide “inside contractors” space in his factory. He would contract with these engineers to produce certain gun parts, but would allow them to take in business from other companies and employ their own workers. Many important manufacturing innovators got their start at the Colt Fire Arms factory and moved on to establish their own businesses. They included rifle-maker Christopher Spencer; machine-tool manufacturers Francis Pratt and Amos Whitney; George A. Fairfield, later Superintendent of the Weed Sewing Machine Company and the Hartford Machine Screw Company; steam engine innovator Charles B. Richards, who became chair of the Department of Mechanical Engineering at the Yale University Sheffield Scientific School; William Mason, master mechanic for the Winchester and Remington rifle companies; Henry Leland, automobile engineer and founder of the Cadillac and Lincoln automobile companies; William Gleason, founder of bevel gear industry and The Gleason Works, in Rochester, NY.²⁶ According to *Connecticut: An Inventory of Historic Engineering and Industrial Sites*, “Graduate apprentices or workmen from Colt and Pratt & Whitney worked throughout Connecticut’s metals industries, bringing with them knowledge of machine construction in such areas as bearings, clutches, drive linkages, gearing and lubrication.”²⁷

In a broader sense, the Colt Fire Arms Company illustrates the major phases of development of urban industrial

²⁴ Merritt Roe Smith, “Army Ordinance and the ‘American System’ of Manufacturing, 1815-1861,” *Military Enterprise and Technological Change: Perspectives on the American Experience*, ed. Merritt Roe Smith, (Cambridge, MA: MIT Press, 1985), p. 78.

²⁵ Colt Fire Arms Company manufactured approximately 300,000 Baxter Portable steam engines between 1868 and 1898. Louis C. Hunter, *A History of Industrial Power in the United States, 1780-1930 – Volume Two: Steam Power* (Charlottesville, VA: University Press of Virginia, 1985), pp. 494-496. Colt Fire Arms Company manufactured “Universal” printing presses between 1873 and 1902. Fred Williams, “The Great Colt’s Armory War!,” *Type and Press*, Winter, 1983.

²⁶ Joseph Wickham Roe, *English and American Tool Builders* (New Haven: Yale University Press, 1916), pp. 174-179.

²⁷ Roth, p. xxi.

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districts, as described in the “American Labor History Draft Theme Study.” The most relevant section of this theme study, “American Manufacture: Sites of Production and Conflict,” (pp. 41-74), explains that urban industrial development proceeded through the following stages: the early innovations in precision metal-working and standardized parts production, the rise of diversified urban manufacturing centers in the mid-19th century, the development of a military-industrial complex in World War II, and deindustrialization of the late 20th century.²⁸

The innovative manufacturing machinery of the Colt Fire Arms Company no longer exists in the factory complex. It was removed and sold off over the years, mainly after World War II. Some of the best collections of precision metal-working machinery, which could include the types of machines developed at the Colt Fire Arms factory are at the American Precision Museum in Windsor, VT; the Smithsonian Institution’s National Museum of American History; and the Henry Ford Museum in Dearborn, MI. The State Museum of Connecticut History, in Hartford, has a collection of manufacturing machinery in storage. Although none of the machines in the State Museum collection were used at the Colt Fire Arms plant, several were used at other Connecticut gun manufacturers and are typical of equipment known to be used at the Colt plant.

Samuel Colt’s Business Achievements

Besides the contributions to the “American System of Manufacture” made by his company, Samuel Colt was also notable for his organizational and marketing achievements. He made skillful use of the patent system to consolidate a monopoly position for 20 years. He demonstrated the axiom that inventions only become adopted when they are successfully marketed. Samuel Colt created a powerful brand name out of his own surname, making “Colt” nearly synonymous with the revolver.²⁹ Felicia Johnson Deyrup, in *Arms Makers of the Connecticut Valley*, wrote, that more than any other arms maker, Samuel Colt realized the importance of stimulating demand through aggressive sales promotion.³⁰

He was an indefatigable and sometimes unscrupulous promoter of his wares, marshaling his colorful personality, appearances before government officials, and major exhibitions in an all-out effort to create a brand name to market his revolvers. Combined with a high-quality product and his company’s demonstrated ability to produce it in quantity, Colt’s promotional activities assured success. Like other 19th-century entrepreneurs, Colt made ample use of testimonials, such as those from Captain Samuel Walker of the Texas Rangers and the crowned heads of Europe and Asia. Colt regularly sent specially engraved presentation versions of his revolvers to government officials, military heroes, titled nobility, and anyone else who might praise his wares and influence their purchase. After his death, the Colt Fire Arms Company continued this practice.

Samuel Colt generated much favorable publicity when he participated in the 1851 Crystal Palace exhibition in London, where his revolvers awed visitors. He addressed the British Parliament and the British Institute of Civil Engineers, delivering a paper entitled “On the Application of Machinery to the Manufacture of Rotating Chambered Breech Firearms and the Peculiarities of the Arms.” These appearances cemented Colt’s reputation,

²⁸ “American Labor History Draft Theme Study,” pp. 41-74.

²⁹ News accounts and popular literature are full of stories emphasizing the “Colt” brand name when mentioning revolvers. The *New York Times* May 15, 1865 account of the capture of Confederate President Jefferson Davis by Union troops described how Davis “yielded promptly to the persuasions of Colt’s revolvers, without compelling the men to fire.” The far-flung presence of Colt revolvers (and Brownings) is described in Mikhail Bulgakov’s Russian novel set in the Russian Civil War, *The White Guard*: “The Colt Automatic that had belonged to Nai-Turs and Alyosha’s Browning were thoroughly greased with engine oil and paraffin.” Mikhail Bulgakov, *The White Guard* (New York: McGraw-Hill Book Co., 1971), p. 194.

³⁰ Felicia Johnson Deyrup, *Arms Makers of the Connecticut Valley: A Regional Study of the Economic Development of the Arms Industry, 1798-1870* (York, PA: George Shumway, Publisher, 1970), p. 124.

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and that of the “American System of Manufacture” in England. The British government furnished its armory at Enfield almost entirely with American machinery. From 1853 to 1857, Colt operated a large factory in London and smaller operations on the Continent, establishing the first significant American manufacturing presence abroad. Colt traveled widely in Europe in the 1850s, cultivating contacts in the governments of all major countries, including Russia, where he was presented to Czar Nicholas I and became a major provider of arms to the Russian government during the Crimean War.

Samuel Colt’s pioneering efforts at marketing resulted from the need to generate business during the lulls between warfare and military contracts. Colt targeted individual consumers and used his flair for publicity and arranged to have descriptions of his revolver and factory widely published in newspapers and magazines. One of his bolder strokes was to commission artist George Catlin to produce a series of twelve paintings and six mass-market lithographic prints illustrating Catlin’s adventures in the West using Colt’s firearms. Samuel Colt even used the exotic architectural features of his mansion Armsmear and the blue onion dome surmounting his factory to help brand his enterprise (Because of its symbolic value, Elizabeth Colt had the blue dome rebuilt after it burned in 1864.). Betsy Hunter Bradley, in *The Works: The Industrial Architecture of the United States*, called Colt’s blue onion dome “one of the most distinctive interpretations of the industrial building tower.... The presence of the tower can best be accounted for by the pragmatism and profit motive that drove the design of industrial buildings.”³¹ At a time when mass marketing and advertising were in their infant stages, Samuel Colt helped lead the way by making his exploits virtually synonymous with the firearms he was selling.

Subsequent Development of the Colt Fire Arms Company

The company Samuel Colt founded survived his premature death in 1862 and a disastrous fire in 1864, during the height of Civil War production. It retained its leadership in manufacturing, small arms innovation, and business development through World War II. As the controlling stockholder Elizabeth Colt was a rare example of a businesswoman who owned a major American industrial company during the late 19th century. She hired talented managers to run the company, including her brother, Richard Jarvis, who served as company president, and general managers General William B. Franklin and John Henry Hall. In 1901, four years before her death, Elizabeth Colt sold the privately-held Colt Fire Arms Company to a New York limited partnership because there were no suitable heirs to carry on management.

Under General Franklin, Colt Fire Arms converted from cap-and-ball revolvers to using metallic cartridges. The company produced the famous Colt .45 (Single Action Army Model 1873), manufacturing over 350,000 of these revolvers, popularly called “Peacemakers,” between 1873 and 1941. General Franklin was a West Point graduate who had served with the Corps of Topographical Engineers, supervised construction of the U.S. Capitol dome (1859-1861), and commanded Union troops in the Civil War. He supervised the reconstruction of the Colt factory after much of it burned in 1864.

Just as Colt manufacturing techniques adapted “armory practice” developed at the Springfield Armory for the production of civilian handguns, General Franklin’s reconstruction of the Colt complex represented a transfer of advanced building technology from the government to the private sector. Franklin utilized rolled-iron Phoenix columns and I-beams to support shallow-arched brick floor structures. Pioneered in Britain, this expensive and still experimental technique of making buildings fireproof had been heretofore almost entirely confined to U. S. government buildings. Franklin had some experience with brick and iron fireproof construction through work on Treasury Department projects before the war. The new East Armory in Hartford represented the third private

³¹ Betsy Hunter Bradley, *The Works: The Industrial Architecture of the United States* (New York: Oxford University Press, 1999), p. 119.

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sector application on this side of the Atlantic and the largest by far.³² The factory reconstruction also entailed installation of Porter-Allen engines, which were the first large scale direct-connected high-speed engines in the country. Originally seen as a radical departure, these engines entered widespread use between the 1870s and the first decade of the 20th century.³³

In the decades after Samuel Colt's death, the Colt Fire Arms Company maintained a competitive edge in small arms manufacture by pursuing a deliberate business strategy to stress innovation, both by internal product development and by attracting outside inventors, and to develop close ties with the U.S. military, particularly with the Springfield Armory. The company hosted regular visits from Springfield Armory officers inspecting ordnance work being done for the federal government.³⁴ During this period, the Army Ordnance Department designed its own rifles and cannon, but turned to the private sector for handguns and machine guns. By remaining in the forefront in development of both types of weapon, Colt Fire Arms retained a strong position in dealing with the Army.

Because of the Colt factory's reputation for technological innovation, it attracted weapons pioneers such as Richard Jordan Gatling (1818-1903) and John M. Browning (1855-1926) to manufacture their machine guns. Although they operated independently as inventors, they chose the Colt Company for machining, testing, and mass production of their designs. With most inventions, the key to their realization is not simply an innovative design; it has to be manufactured at a superior level of quality, in large quantities, at a reasonable cost. Colt Fire Arms was not the only company manufacturing innovative small arms in the late 19th and early 20th centuries, but as the largest and most technologically advanced it was attractive to first-class inventors.

When the U.S. Army officially adopted the Gatling gun, the world's first effective machine gun, in 1866, inventor Richard Gatling arranged for the Colt Company to manufacture the weapon. Gatling located his small research company in the Colt Fire Arms factory, which made 25 models of the Gatling gun until it became obsolete around 1911.

Similarly, when John M. Browning, a prolific mechanical genius who accumulated 128 patents on 80 different firearms, undertook to develop a machine gun, he went to Colt's because the company had been manufacturing Gatling guns and had the most extensive experience dealing with the federal government.³⁵ Although Browning designed weapons that were manufactured by other companies, he maintained space for research and development at the Colt plant because of its advanced capacity for designing and producing firearms.³⁶ Browning had a particularly close relationship with the long-time Colt Fire Arms production manager Fred Moore. Colt historian Ellsworth S. Grant summarizes by saying that Browning, "the foremost living perfecter of firearms," had "his longest and last association with Colt's—one that extended over a period of nearly thirty years."³⁷

³² Sara Wermiel, *The Fireproof Building: Technology and Public Safety in the Nineteenth-Century American City* (Baltimore: Johns Hopkins University Press, 2000); Mark Snell, *From First to Last: The Life of Major General William B. Franklin* (New York: Fordham University Press, 2002).

³³ Louis C. Hunter, pp. 450-472.

³⁴ A sampling of official U.S. Army Ordnance Department staff assignments published in the *New York Times* between 1890 and World War I mention that Army officers stationed at the Springfield Armory were making inspections at the Colt factory. *New York Times*, June 23, 1891; August 6, 1892; August 21, 1898; October 26, 1898; January 29, 1903; April 2, 1904; February 9, 1980; December 31, 1910; March 20, 1912; February 26, 1913.

³⁵ John Browning and Curt Gentry, *John M. Browning, American Gunmaker* (Garden City, NY: Doubleday & Company, 1964, p. 150.

³⁶ *Ibid.*, pp. 117, 169, 196.

³⁷ Ellsworth Grant, *The Colt Legacy: The Colt Armory in Hartford, 1855-1980* (Providence, RI: Mowbray Company, 1982), pp. 94, 97.

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Colt Fire Arms and Browning originally sold the Colt Model 1895 Automatic Machine Gun, the first fully automatic weapon purchased by the United States military, to the U.S. Navy, which used it for use in the Spanish-American War and the Chinese Boxer Rebellion.³⁸ The U.S. Army purchased this model a decade later and only ordered it from Colt Fire Arms in great numbers at the beginning of World War I, when it was the only machine gun that could be manufactured speedily.³⁹ As for the Colt .45 Browning Automatic Pistol, Colt Fire Arms got the U.S. Army to adopt the automatic pistol as its official sidearm in 1911. Because of its reliability, the Army used this legendary handgun (M1911) through the Korean War.

World War I brought a surge of prosperity to the Colt Fire Arms Company. The company supplied .45 caliber automatic Browning pistols to Russia and Great Britain both openly and secretly, through Canada, before the United States entered the war in 1917. As a result, sales grew from \$2.2 million in 1914 to \$10 million in 1916, while employment increased from 1,056 to 2,400. The company had its most profitable year in 1916, when it netted \$6,346,000 in earnings.⁴⁰

During the war the machine gun became the defining weapon of trench warfare and the source of much of its horror. Historian John Ellis, in *The Social History of the Machine Gun*, attributes the industrialization of warfare that occurred with World War I to the development of the machine gun. He argues that Americans, in contrast to Europeans, who began the war with a romantic devotion to individual initiative and only grudgingly adopted the machine gun and the tactical adjustments it demanded, developed this lethal technology because of their "faith in the unlimited potential of machines." This attitude was prevalent at the Colt Fire Arms Company, where its long-standing experience manufacturing the machine guns of Gatling and Browning placed it in a leadership position during the war.⁴¹

Despite the intellectual predisposition of Americans to accept the machine gun and the leading role of American inventors, backed by the Colt company, in developing it, the U.S. Army entered World War I woefully ill-equipped with these weapons. When the U.S. declared war in 1917 the Army possessed less than 500 relatively modern machine guns, and the first American troops arriving on the Western Front had to be equipped with French armament, much of it of inferior quality.

As one of the only two armories in the United States capable of producing machine guns, Colt's became vital in the nation's forced military buildup. In December 1916 the U.S. Government contracted with Colt's to supply 4000 Maxim-Vickers machine guns. Soon after the declaration of war, John Browning returned to Colt's and set up shop in Hartford, completing the design of a heavy machine gun and a light automatic rifle, both .30 caliber, and making constant improvements in manufacturing techniques. The first of Browning's automatic rifles (BARs) reached the front in July 1918. Just at the close of the war, Browning successfully tested the .50 caliber machine gun, which became an essential infantry weapon through World War II and the Korean War.

During World War I, Colt Fire Arms manufactured 487,700 Browning automatic pistols (96% of those weapons made in the United States), 151,700 Colt revolvers (50% of those manufactured), 10,000 .30 caliber Browning Automatic Rifles (17% of those manufactured), and 13,000 Maxim-Vickers machine guns (100% of those manufactured) for the U.S. Army and allied armies. In addition, Colt's completed 41,000 machine guns, 43,000

³⁸ Johnson and Lockhoven, p. 412.

³⁹ *Ibid.*, p. 162.

⁴⁰ Grant, pp. 221-222.

⁴¹ John Ellis, *The Social History of the Machine Gun* (Baltimore: The Johns Hopkins University Press, 1986), p. 23.

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automatic rifles, and 150,000 M1911 pistols under contract with several other arms manufacturers.⁴² These contracts involved much more than paperwork and financial negotiation. Satisfactory fulfillment of contracts entailed the transfer of innumerable examples of unwritten “shop practice” that expanded on mechanical drawings, a demanding process. Since no single corporation had all the necessary production capacity, this kind of enforced sharing was critical to the war effort.⁴³

To fill the extraordinary demands of the war, the Colt plant underwent a major expansion in 1916, adding the South and North Armories, the Machine Shop, and several smaller structures. Effectively doubling the capacity of the plant, the expansion completed the scene that is still largely visible at Coltsville today, with structures from two distinct eras welded together to form a cohesive operating entity. The World War I additions were constructed by Aberthaw Construction Company, an innovator in building concrete factories.⁴⁴ Colt’s wartime employment peaked at 10,000 in 1918, when the company’s revenues reached \$32 million. Over the course of the war it shipped a total of \$66 million worth of munitions and earned \$21.5 million.⁴⁵

Wartime experience confirmed the rapidly increasing importance of military aircraft. The Colt company, characteristically, was determined to retain its leadership position in this promising technology. During the war Colt’s converted some of the Maxim-Vickers machine guns to use on airplanes, as it was the only weapon that could be synchronized to fire between propeller blades.⁴⁶ Following the characteristic course of weapons development, the success of this offensive weapon created the demand to counterbalance it, and the U.S. Army and Colt’s placed a high priority on developing an anti-aircraft gun. In 1921, John Browning successfully tested a 37mm anti-aircraft cannon, his last invention, at the Colt factory. Testifying to the unrivaled capabilities of the Colt armory and his special relationship with it, when the U.S. Army contracted to develop the cannon, Browning told his colleague Fred Moore, “Well, we’d better make this model at Colt. It’s getting too big for our shop out West. I’ll go up to Hartford with you from Washington, and we can start the drawing.”⁴⁷ According to the U.S. Ordnance Department official history, after Browning’s death, “Colt’s Patent Fire Arms Company pushed forward work upon a 37-mm.”⁴⁸

Between the wars, when military orders were intermittent and small, the Colt Company maintained and updated the technological capacity to research, develop, and produce advanced weapon designs, be they handguns or machine guns. With employment reduced to a base of about 1,000, Colt continued manufacturing firearms for the military and private markets. It was the sole manufacturer of Government-model Browning automatic pistols between the wars, making approximately 150,000. The company was also the sole manufacturer of Thompson submachine guns, notoriously, used by gangsters during the Prohibition years, until the federal government outlawed the sale of “tommy” guns and other fully automatic weapons to civilians in 1934.

⁴² Charles W. Clawson, *Colt .45 Service Pistols: Models of 1911 and 1911A1* (n.p.: Charles W. Clawson, 1991), p. 212; Ian V. Hogg, and John Walter, *Pistols of the World*, 4th edition (Iola, WI: Krause Publications, 2004), pp. 76, 292; Dolf L. Goldsmith, *The Grand Old Lady of No Man’s Land: The Vickers Machinegun* (Coburn, ON: Collector Grade Publications, 1994), pp. 225-226; James L. Ballou, *Rock in a Hard Place: The Browning Automatic Rifle* (Coburn, ON: Collector Grade Publications, 2000), p. 62. According an article “Vickers Gun Wins Board’s Award,” *New York Times*, Nov. 11, 1916, “The Colt company has been selling practically its entire output of Vickers guns to the Entente Allies since the war began.”

⁴³ Johnson and Lockhoven, p. 440.

⁴⁴ According to an article “Colts to Increase Plant,” *New York Times*, June 30, 1915, the Colt Fire Arms Company “has decided to double its plant to fill huge war orders for machine guns.” Amy E. Slaton, *Reinforced Concrete and the Modernization of American Building, 1900-1930* (Baltimore: The Johns Hopkins University Press, 2001), pp. 160-161.

⁴⁵ Grant, p. 103.

⁴⁶ *Ibid.*, p. 94

⁴⁷ Browning and Gentry, p. 212.

⁴⁸ Constance McLaughlin Green, Harry C. Thomson, and Peter C. Roots, *The Ordnance Department: Planning Munitions for War* (Washington, DC: Department of the Army, Office of the Chief of Military History, 1955), p. 407.

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Despite meager arms purchases by the U.S. Army and the onset of economic depression, the Colt company weathered the 1930s, and even maintained a dividend (though achieved in part by drawing on accumulated surpluses). It also endured the devastating Connecticut River flood of 1936, after which the original dike was replaced. Company executives continued the tradition of paternalism, apparently retaining older employees and keeping more employees on the payroll than were strictly needed, though the company's strike in 1934 eroded these traditions.

Determined to avoid a repeat of the humiliating experience of World War I, when the U.S. was unable to properly arm its soldiers, the Ordnance Department expended some of its limited resources to study and plan for wartime production. Colt Fire Arms was a key partner in this effort. As the owner of Browning military weapons patents, it worked with the Ordnance Department to improve the ballistic, cooling, and rate-of-firing characteristics of .30 and .50 caliber Browning machine guns.⁴⁹ Under contract with the Ordnance Department, the Colt Fire Arms Company made production studies of these guns and helped prepare descriptions of their manufacture.⁵⁰

During World War II, another major buildup occurred at the Colt Fire Arms Company, and the plant became an important component of the "Arsenal of Democracy," which has been described in the "National Historic Landmark Draft Theme Study: World War II and the American Home Front." The theme study finds that "Most historians agree that World War II was won as surely on the American home front as it was on the battlefield."⁵¹ The remarkable ability to manufacture vast amounts of weapons and military supplies gave the United States and its allies a decisive edge in the war. The "Home Front" Theme Study has identified "places associated with production," including ordnance plants, as property types that should be preserved and interpreted.

As the only company that had maintained an active capability to make machine guns during the interwar years and the sole existing source for the 37mm anti-aircraft gun, the Colt Fire Arms Company occupied a critical position as the U.S. geared up for war. It held the patents on the two Browning machine guns, which had been adopted as standard by the Army. The .50 caliber was especially valuable because it could be converted to tank, aircraft, or anti-aircraft use. Colt's classic M1911 pistol was also standard, though handguns received a lower priority in wartime production. In the fall of 1939, during the "phony war," the British had agreed to finance an expansion of the Colt plant to produce Browning machine guns, but these plans were overtaken by the swift German successes in the West in the spring of 1940.⁵² Alarmed by this blitzkrieg, the U.S. in July 1940 appropriated \$50 million for small arms and ammunition, and Colt's received a portion of this order.⁵³

In 1939, the Colt Fire Arms plant employed 2,600. Employment grew to 7,000 in 1941 and peaked at 16,000 in 1944, when satellite Colt plants were opened in the Hartford area. Colt's production in World War II included 575,600 Colt .45 caliber automatic Browning pistols (31% of those manufactured), 38,000 .30 caliber Browning aircraft machine guns (5%), and 240,600 .50 caliber Browning machine guns (13%).⁵⁴ These weapons continued to be used by the United States military and the armies of other countries for decades after World

⁴⁹ *Ibid.*, pp. 178, 423.

⁵⁰ Harry C. Thomson and Lida Mayo, *The United States Army in World War II: The Technical Services; The Ordnance Department: Procurement and Supply* (Washington, U.S. Army Center of Military History, 1960), p. 26, 156, 179.

⁵¹ National Historic Landmarks Survey, "National Historic Landmark Draft Theme Study: World War II and the American Home Front" (Washington, DC: National Park Service, 2004), p. 2.

⁵² Thomson and Mayo, p. 159.

⁵³ *Ibid.*, p. 27.

⁵⁴ Clawson, p. 344; Goldsmith, p. 407; Ballou, pp. 55-68.

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War II. The company's production of 37mm guns, both aircraft and anti-aircraft, was essential. Under intense pressure from Ordnance officers, Colt produced more than 6000 of these aircraft guns in the desperate year of 1942.⁵⁵

The U.S. Army purchased the patents for Colt-model automatic handguns, rifles, and machine guns and contracted with several other large corporations to manufacture them because the demand was greater than the Colt Fire Arms Company could fill on its own. The Colt Fire Arms Company, serving as a workshop for firearms design and production, provided the original designs and machine tools to other corporations. General Motors, for example, received a contract to manufacture .50 caliber Browning machine guns.⁵⁶ According to the *New York Times*, "The century-old Colt Company not only is producing the world's fastest machine gun in larger quantities and greater quality but is assisting half a dozen other potential producers to get underway."⁵⁷

The Colt Company received the Army-Navy "E" award for production, but this honor concealed underlying problems. Despite initial advantages such as the long-standing partnership with the Army and unrivaled experience in production, the company's performance in WW II was somewhat disappointing, especially when compared to its brilliant achievements in the previous war. Even while the Colt Fire Arms Company was producing weapons at a prodigious rate to support the war effort, it contrived to lose money beginning in 1943. The subsequent decline was foreshadowed by these wartime troubles.

It appears that the deeply rooted corporate culture that had brought success to Colt Fire Arms in the past began to work to its detriment. Traditional paternalism became inadequate in a time of increasing labor militancy, and the company had difficulty managing its greatly expanded workforce. Some of the manufacturing equipment and techniques tended to be outmoded, and Colt's customary stress on precision workmanship became increasingly out of place in a war that emphasized quantity and shortcuts.⁵⁸ Newcomers to weapons manufacture, unencumbered by accumulated precedent, were actually often at an advantage.⁵⁹

By 1946, military orders had ceased and the number of Colt Fire Arms Company employees plunged below 1,000. Demolition of some Colt armory buildings began in 1947. The company struggled and was bought out by the conglomerate Penn-Texas in 1955. The main plant moved to West Hartford, but production of the Colt AR-15 and M-16 automatic rifles, introduced in 1960 and used by the American military since the Vietnam War, took place in the Machine Shop of the historic plant. The Colt Fire Arms Company finally abandoned its remaining operations at the Coltsville plant in 1993 and now all of its operations are headquartered in West Hartford. The Hartford area maintains a connection to the great age of precision manufacturing through the presence of the Colt Fire Arms Company and many independent machine shops. Most prominent among today's heirs of precision manufacturing is Pratt & Whitney Aircraft, which was spawned by Pratt & Whitney Machine Tools, which in turn grew out of the Colt Fire Arms factory.

⁵⁵ Thomson and Mayo, p. 80.

⁵⁶ Eliot Janeway, *The Struggle for Survival: A Chronicle of Economic Mobilization in World War II* (New Haven: Yale University Press, 1951), pp. 213-14. According to an article "Huge New Industry for Machine Guns," *New York Times*, March 7, 1941, "The century-old Colt Company not only is producing the world's fastest machine guns in larger quantity and greater quality but is assisting half a dozen other potential producers to get under way." The other companies included General Motors subsidiaries, Frigidaire, AC Spark Plug, Saginaw Gear Works, and Brown Light Works, as well as Savage Arms Company, Buffalo Arms Company, and Kelsey Hays Wheel.

⁵⁷ "Huge New Industry for Machine Guns," *New York Times*, March 7, 1941.

⁵⁸ Grant, p. 159. Ellsworth Grant's book mentioned that the Colt Fire Arms Company was in the "incipient stage of its downfall" by 1943. Grant, p. 162.

⁵⁹ Thomson and Mayo, pp. 78, 80, 181.

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The Creation of Coltsville

For nearly a century, the Colt Fire Arms Company was a national leader in small arms production and precision manufacturing. The industrial district that Samuel Colt developed around his factory, which became known as Coltsville, was an important example of a mid-19th-century planned urban industrial district. Similar to planned cities from Lowell, MA, to Pullman, IL, Samuel and Elizabeth Colt endeavored to create a model community in which housing, recreation, and spiritual comfort were provided. Samuel and Elizabeth Colt made many of the paternalistic gestures popular with progressive industrialists of the Victorian era. Their brand of paternalism, however, was relatively benign, not projecting stringent social control and moral supervision, mainly because the Colt Company was geographically integrated with the rest of Hartford and housed only a fraction of its employees.⁶⁰

Unlike New England textile manufacturing communities that had been built mostly from scratch before then, Coltsville developed as a neighborhood of an existing city. It represented the “metropolitan path to industrialization” described in the “American Labor History Draft Theme Study.” The “Labor Theme Study” has identified the old walking cities that were involved in diverse industrial production as meriting attention, particularly since many of these industrial districts have disappeared due to urban renewal and deindustrialization.⁶¹ In contrast to the single-industry communities that developed in many parts of the country, particularly the New England textile towns, the “metropolitan” industrial centers produced numerous, synergistic industries. Hartford’s first major industry—gun-making—for example, spun off manufacturers of machine tools, sewing machines, typewriters, bicycles, automobiles, and aircraft engines.

In the early 1850s, Samuel Colt, after manufacturing his pistols in space leased from others, decided to create his own industrial settlement in the South Meadows section of Hartford, a sparsely developed area prone to flooding from the nearby Little River and Connecticut River. Since the South Meadows had not been buildable, Colt was able to purchase the land at a low price. Colt set about building a large, steam-powered factory, housing and social facilities for workers, and his own mansion Armsmead. He wanted to establish a planned industrial community in an urban setting.

In order to make South Meadows secure for development, Colt built a dike along the bank of the Connecticut River. Although the berm was severely tested by the great flood of 1854, the dike and the first armory buildings were completed in 1855. Colt laid out a grid of streets, using names that recalled the Native American and Dutch people who previously had occupied the area. Coltsville was connected early on to the rest of Hartford by the first omnibus and streetcar lines to be developed in Hartford. Coltsville was always an integral part of Hartford, helping to spawn factories across the city and make it the wealthiest American city per capita by the early 20th century.

Soon after the armory itself was completed, Samuel Colt added 20 six/eight-family houses (10 buildings survive) on Huyshope and Van Block Avenues to attract and retain skilled workers in a competitive labor market. Initially machinists, toolmakers, and other craftsmen lived there, but by the 1880s the blocks were primarily occupied by the families of unskilled laborers. The more affluent employees found better housing

⁶⁰ Industrial paternalism was strongest in communities that were small and isolated and less so in urban settings. Margaret Crawford, *Building the Workingman’s Paradise: the Design of American Company Towns* (New York: Verso, 1995), p. 31.

⁶¹ “American Labor History Draft Theme Study,” pp. 18, 49.

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opportunities elsewhere in the city.⁶² Like many American industrialists, Colt wanted to supply housing so that he could attract workers to an undeveloped part of the city. Colt's working housing was dissimilar from the boardinghouses built in New England textile cities like Lowell and Lawrence, MA, which were originally designed to exert paternalistic social control over the single young farm girls, who were the original employees. The growth of Colt's enterprise meant that only a small proportion of employees could be housed in the tenements and cottages. Hartford was a growing city with plenty of housing opportunities outside of Coltsville, so company housing was not necessary over the long term to attract workers. The city was small enough that people could ride a streetcar or walk from other neighborhoods.

According to Jack Rohan's *Yankee Arms Maker*, Samuel Colt was one the earliest industrialists to provide varied recreational and educational facilities for his employees.⁶³ Charter Oak Hall (demolished) contained reading rooms, classes in art and music, and an auditorium for lectures, entertainments, and dances. There was a company-sponsored German beer garden. Samuel Colt sponsored militia companies—Colt's Armory Guards and Colt's Rifle Regiment. The Colt Band was a fixture at parades and civic events through World War II. The company also sponsored baseball teams. Mrs. Colt endowed the neighborhood with a church of her own Episcopal denomination, which was attended by company executives and workers, growing continuously from its founding in the 1860s until well into the 20th century.⁶⁴ The Caldwell Colt Memorial Parish House provided such amenities for Coltsville as a kindergarten, Sunday School, library, sewing room, cooking school, gymnasium, pool tables, and bowling alleys.⁶⁵

Samuel and Elizabeth Colt built an elaborate mansion in Coltsville in 1857 and called it Armsmear. Samuel Colt himself was responsible for the overall design, working with local architect Octavius Jordan. Armsmear featured Italianate and Moorish decoration. Next to P.T. Barnum's Iranistan in Bridgeport, CT, Colt's Armsmear was considered the "most exotic house... incorporating some Eastern features" anywhere in America before the Civil War.⁶⁶

The estate grounds originally included ponds, outdoor sculpture, a huge greenhouse, and gardens and bowers. The designers of the grounds were landscape architecture pioneers Robert Morris Copeland and H. W. S. Cleveland. Although the magnificence of the Armsmear grounds gradually faded over the years and was further transformed by the conversion of the grounds into Colt Park in the early 1900s, the vista overlooking the park and the factory buildings remains. The gardener's cottage and the large stable still stand behind the main house. After Samuel Colt's death, Armsmear was home to Elizabeth Colt and her brother Richard Jarvis, who served as president of the company until it was sold to New York investors in 1901. Son Caldwell Colt also lived there, though his contributions to the company's management were small.

A second large Italianate villa house on the grounds of Armsmear was built to house Samuel Colt's brother

⁶²Social composition of the housing derived from listing in the 1880 manuscript census schedules for Hartford, microfilm, Connecticut State Library.

⁶³ Jack Rohan, *Yankee Arms Maker* (New York: Harper & Brothers, 1935), p. 184.

⁶⁴ Grant, p. 83. The Church of the Good Shepherd parish began as a mission of St. John's Episcopal Church on Main Street and operated out of Charter Oak Hall until the church was completed in 1869. Church records indicate a broad range of members ranging from the Colt family and General William B. Franklin to pistol makers, printers, lumbermen, bookkeepers, and painters living in company housing to other persons living in the general area. "Church of the Good Shepherd Baptisms, Burials, Communicants and Marriages, 1865-1876," pp. 14-22. Episcopal Church Records, Connecticut Diocese Archives, Hartford, CT. The occupations of members have been identified by cross-referencing with the *1865 Hartford City Directory*. Parish records show that the number of parish families grew steadily from 150 families in 1869 to 375 families in 1924.

⁶⁵ Hosely, p. 209.

⁶⁶ Clive Aslett, *The American Country House* (New Haven: Yale University Press, 1990), p. 30.

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James. James Colt was Samuel's close associate in his early dealings. He helped supervise the building of the armory and for a short time oversaw the London operation. James Colt left the company when the two brothers fell out in 1859. During the 1880s Elizabeth Colt built four houses on the southern edge of the estate, fronting on Wethersfield Avenue, for armory managers and their families and the rector of the Church of the Good Shepherd. The two houses that remain are included in the district because they illustrate the concept of Coltsville as a cohesive factory village.

An integral element of Samuel Colt's industrial community was the Colt Willow Ware Manufacturing Company, established in 1859 to utilize the willows that were planted to stabilize the earthworks of the dike. This subsidiary employed about 120 people and made baskets, wicker furniture, picture frames, and similar items. Samuel Colt hoped that the wives and children of his pistol makers would find useful employment at the willow ware factory. The two-family "Potsdam" cottages (nine of the original ten survive) were designed in "Carpenter Gothic, reminiscent of Germanic styles attractive to the German willow workers Colt recruited to staff the factory. The willow ware complex also included several eighteen-family tenements, which have been demolished along with the willow ware factory building itself, which burned in 1873 and was never rebuilt. Even before the willow ware operation was discontinued, armory workers occupied some of the cottages."⁶⁷

The "American Labor History Draft Theme Study" describes the importance of understanding the work and social lives of manufacturing workers. At Coltsville, the skilled workforce was relatively well paid and the Colt Company provided such benefits as housing and social activities for workers. According to historian David Nelson, gun makers held a leading place in the ranks of industrial workers, especially compared with workers in iron and steel, textiles, and shoe-making: "precision-machinery manufacturers had established what even by twentieth-century standards were reasonably attractive and healthy working conditions."⁶⁸ Felicia Deyrup called armory workers like those at Colt Fire Arms a "favored class."⁶⁹ The highly skilled workforce developed at the Colt Fire Arms factory helped create the labor pool that staffed so many other industrial enterprises in Hartford during the latter 19th and early 20th centuries. Despite relatively high pay and company benefits, Colt Fire Arms Company workers did unionize and even went on strike, in 1916.

The "American Labor History Draft Theme Study" also mentions how immigrants and minorities found occupational niches in such industries as the Colt Fire Arms Company. Notably, Germans and Irish in the 19th century and African-Americans from the South in the 20th found job opportunities in Hartford at the Colt Fire Arms plant. The Colt Fire Arms factory relied on Irish immigrants to serve as skilled blacksmiths as well as unskilled labor. So many Irish men were employed by Colt that in 1859 a second Catholic parish was founded in the south end of the city.⁷⁰ When blacks migrated from the South to Hartford during World War II, one of their primary destinations was a job in the Colt Fire Arms factory.⁷¹

⁶⁷ City directory listings in 1869, for example, include four willow-ware workers and five pistol makers, as well as four laborers and a silver-plater who probably worked at the armory as well. *Geer's Hartford City Directory for 1869-70* (Hartford: Elihu Geer, 1869).

⁶⁸ David Nelson, "The American System and the American Worker," eds. Otto Mayr and Robert C. Post, *Yankee Enterprise: The Rise of the American System of Manufacturers* (Washington, DC: Smithsonian Institution, 1981), p. 173. Nelson argued that the "American system" produced a new, more highly organized labor force and conditions of work: "The manufacturer who introduced the American system installed more than a series of machines and a system of machine production; he also made fundamental decisions regarding the treatment of his labor force, his relations with his subordinates, and, ultimately, his conception of social progress." Nelson, p. 173.

⁶⁹ Deyrup, pp. 163-164.

⁷⁰ Bruce Clouette, "Getting Their Share: The Irish and Italian Immigrants of Hartford, Connecticut," unpublished PhD diss., University of Connecticut, 1992.

⁷¹ "Semi-Skilled Negroes Find More Jobs Open," *New York Times*, May 3, 1942.

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The institutions and memorials that Elizabeth Colt built in honor of her husband and her son Caldwell were important elements of Coltsville. Elizabeth Colt was devoted to celebrating her husband as one of America's industrial titans. The memorial book she commissioned Henry Barnard to write, *Armsmear: The Home, the Arm, and the Armory of Samuel Colt* (1866), helped shape the Samuel Colt myth of Promethean inventiveness and endurance in the face of overwhelming challenges. The Colts felt that the Hartford community, Samuel's home town, had originally been hostile to his enterprises, and they wanted to trumpet his success. In pious Victorian-era fashion, Elizabeth Colt perpetuated the myth by building the Church of the Good Shepherd (1869), which has stonework depicting revolvers and bullet moulds and a stained-glass window portraying Samuel Colt as Joseph serving as the Egyptian pharaoh's steward. She later commissioned the Colt Memorial Statue (1905) in Colt Park, which depicts the rise of Colt from a cabin boy whittling a model revolver to the confident titan of industry. After her son Caldwell died in Florida in 1894, Mrs. Colt commissioned architect Edward Tuckerman Potter, who had designed the Church of the Good Shepherd, to build the Caldwell Colt Memorial House (1896) as a parish and community hall.

The memorials also represent Elizabeth Colt's role as a leading philanthropist. In the 19th century, successful manufacturing enterprises produced great wealth for their owners. Many leading American entrepreneurs used some of their wealth for philanthropic activities. During his lifetime Samuel Colt contributed to the establishment of Hartford Hospital and proposed to establish a technical college in Hartford, but he died before his vision was realized. After Colt died, his company generated a large fortune for Elizabeth Colt, which she used for philanthropic purposes. Elizabeth Colt became a civic leader in Hartford, organizing and providing financial support for many social welfare causes. She led an 1878 effort to consolidate all local charities into a single coordinated charity. Elizabeth Colt also served as President of the Soldiers Aid Society during the Civil War, the Hartford Arts Society, The Union for Home Work (a pioneering social service agency), and the Connecticut Society of Colonial Dames. In her final bequest, she gave Armsmear to become a retirement home for women; the grounds of the estate for a public park; and her art collection to the Wadsworth Atheneum along with funds to build a museum wing to house her collection. When she died, the *Hartford Courant's* wrote of Elizabeth Colt: "What she has done for this community is incalculable ... She was the First Woman of Connecticut."⁷²

After Elizabeth Colt's death, the Colt Fire Arms Company, then owned by a limited partnership, continued to sponsor social activities for workers, including the Colt Band, sports teams, and company picnics. Nevertheless, corporate paternalism was declining. Coltsville became more integrated into the economy and urban landscape of Greater Hartford, exemplifying the "metropolitan path to industrialization" described in the "American Labor History Draft Theme Study." The focus of Coltsville was the factory complex, which underwent a massive expansion during World War I to support the arms buildup. Up through World War II, the Colt Fire Arms Company remained one of the nation's leading small arms producers and was a vital contributor to United States military efforts.

The Coltsville Historic District illustrates important contributions to manufacturing technology made by Samuel Colt and the industrial enterprise he founded. Colt's company drew upon the technological innovations of the firearms industry in New England to achieve a high level of mechanization and production. The company was a highly influential national source of innovation in precision manufacturing and firearms design well into the 20th century. During both World War I and World War II, the company was one of the nation's leading small-arms producers and made a vital contribution to the U.S. war effort. Coltsville is a tangible embodiment of the development of a nationally important arms manufacturer for the latter 19th and 20th centuries.

⁷² *Hartford Courant*, August 24, 1905.

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Previous documentation on file (NPS):

- Preliminary Determination of Individual Listing (36 CFR 67) has been requested.
- Previously Listed in the National Register (numerous National Register listings)
- Previously Determined Eligible by the National Register.
- Designated a National Historic Landmark. (Armsmear [Samuel Colt Home])
- Recorded by Historic American Buildings Survey: # CT-357
- Recorded by Historic American Engineering Record:

Primary Location of Additional Data:

- State Historic Preservation Office
- Other State Agency – Museum of Connecticut History/Connecticut State Library, Hartford, CT
- Federal Agency
- Local Government
- University
- Other (Specify Repository): Antiquarian and Landmarks Society, Hartford, CT

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10. GEOGRAPHICAL DATA

Acreage of Property: 135 acres

UTM References:	Zone	Easting	Northing
1.	18	693280	4624900
2.	18	694060	4624900
3.	18	694120	4624950
4.	18	694020	4625060
5.	18	694080	4625120
6.	18	694020	4625400
7.	18	694080	4625240
8.	18	694160	4625280
9.	18	694420	4625010
10.	18	694280	4624910
11.	18	694320	4624870
12.	18	694200	4624760
13.	18	694310	4624620
14.	18	694290	4624580
15.	18	694180	4624470
16.	18	693440	4624350
17.	18	693420	4624520
18.	18	693350	4624510
19.	18	693720	4625380
20.	18	693760	4625380
21.	18	693850	4625240
22.	18	693790	4625200
23.	18	693820	4625130
24.	18	693760	4625100
25.	18	693670	4625240

[The last seven UTM references define the property around the Church of the Good Shepherd and Colt memorial Parish House.]

Verbal Boundary Description:

The boundary, shown on the accompanying map (scale 1" = 327'), embraces 1) the former Colt industrial buildings bounded north by Nepaquash Street, east by Van Dyke Avenue, south by Masseek Street, and west by Huyshope and Van Block Avenues; 2) former worker housing bounded north by Sequassen Street, east by Huyshope Avenue, south by Weehassett Street, and west by Van Block Avenue; 3) the south side of Curcombe Street between Locust Street and Hendricxsen Avenue; 4) Colt Park from Wethersfield Avenue east to Van Block and Hendricxsen Avenues, bounded north by Stonington Street and south by Warwarne Avenue; 5) Armsmead (80 Wethersfield Avenue), the James B. Colt House (154 Wethersfield Avenue), and the houses at 176-180 and 184 Wethersfield Avenue; and 6) the Church of the Good Shepherd and Caldwell Colt Memorial

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Parish House, 155 Wyllys Street.

Boundary Justification:

The boundary for the Coltsville Historic District was drawn so as to include all those reasonably proximate resources that directly support the national significance of the Colt Fire Arms Company in the development of American industry. The Coltsville Historic District is substantially coterminous with the Colt Industrial District previously listed on the National Register of Historic Places (boundary increase, 2000) except that the Church of the Good Shepherd and its parish house, which are geographically discontinuous but nearby, have been added. The boundary encloses the Colt Fire Arms factory complex, the Armsmear mansion (existing NHL), Colt Park, three manager houses, and worker housing.

The boundary excludes formerly Colt-owned parcels that now are in use for other purposes, such as the businesses along Warwarme Avenue. Additional houses on Wethersfield Avenue south of 184 Wethersfield Avenue, originally the property of Mrs. Colt, were not included because they were sold or rented to other parties within ten years or so of their construction. Three of the figures involved in the enterprise, Samuel Caldwell Colt, William B. Franklin, and John Henry Hall, lived on the west side of Wethersfield Avenue, but not in houses that were built specifically for them; for this reason, the boundary was not extended to include any properties on the west side.

The Church of the Good Shepherd property at 155 Wyllys Street, which includes both the 1869 church and the 1896 Caldwell Colt Memorial Parish House, is discontinuous but almost abuts the rest of the historic district at its southeast corner. The buildings are visible from the factory area, Colt Park, and even Wethersfield Avenue, so the visual link is much stronger than the map might indicate. Moreover, this part was always a “dog leg” in the Colt holdings because of the Solomon Porter property to the north, which interrupted the Colt land holdings throughout most of the 19th century. The Church of the Good Shepherd shares in the collective association of Coltsville with the story of the Samuel and Elizabeth Colt and the Colt Company because it was built to serve the spiritual needs of residents of the neighborhood and to memorialize Samuel Colt. Similarly, the parish house shares in the collective association of Coltsville with the story of Samuel and Elizabeth Colt and the Colt company because it was built to serve as a meeting place for the neighborhood.

Hartford has a number of Colt-related resources located in other parts of the city, all of which are listed on the National Register of Historic Places as part of larger entities: the Colt Memorial Wing at the Wadsworth Atheneum Museum of Art, donated by Elizabeth Colt; a house on Charter Oak Place occupied many years by Richard J. Gatling, the inventor who manufactured his machine gun and headquartered his company in the Colt Armory; and two elaborate Colt family funerary sculptures in the Old North and Cedar Hill cemeteries. These were not included in the proposed NHL historic district because of the lack of visual and physical continuity with the contiguous resources in the district.

Van Dyke Avenue marks the eastern border of the district because Interstate I-91, an elevated limited-access highway constructed during the 1960s, provides a strong visual obstruction. Van Dyke Avenue runs along the summit of the original Colt Dike, just as Warwarme Avenue continues to do. Neither the dike on Warwarme Avenue or on Van Dyke Avenue still serves as a dike because the U.S. Army Corps of Engineers built a new dike between the original dike and the Connecticut River during the early 1940s. The Hartford river front and dike system was reconstructed as part of an extensive U.S. Army Corps of Engineers flood-control project.

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