

Savanna Army Depot
Savanna (vicinity)
Carroll & Jo Daviess County
Illinois

HAER No. IL-19

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WRITTEN HISTORICAL AND DESCRIPTIVE DATA

Historic American Engineering Record
National Park Service
Department of the Interior
Washington, DC 20013-7127

HISTORIC AMERICAN ENGINEERING RECORD

Savanna Army Depot Activity

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Location: Approximately 8 miles NW of Savanna, Illinois in Carroll and JoDaviess Counties. Bounded on the SW by the Mississippi River, on the NE by Burlington Road, and on the SE by the Apple River.

Date of Construction: Established during WWI, the majority of buildings were constructed in the 1940s.

Owner: Department of the Army

Significance: Originally established in 1918 as an artillery proving ground, Savanna was used after WWI to store unused military hardware. This marked the beginning of Savanna's principle mission, the storage of ammunition and explosives, a mission which continues to this day. The greatest period of growth took place during WWII, when industrial plants and temporary housing and administrative facilities were added to Savanna's depot responsibilities although additional activities were later added, Savanna's WWII-era landscape is still in evidence. Savanna Army Depot possesses limited significance as a good example of an active military facility which includes properties related to WWI and WWII military needs and peacetime military preparedness.

Historical Report
Prepared by: Wesley Shank, John Mecum and Debra Wolfe, 1982.

Prepared for
Transmittal by: Robie S. Lange, HABS/HAER, 1985.

EXECUTIVE SUMMARY

Savanna Army Depot Activity, located on 13,062 acres of flat terrain a few miles northwest of Savanna, Illinois, is part of the Army's Depot System Command (DESCOM). Established during World War I as an artillery proving ground its role soon changed to that of storage facility. The depot still fulfills this storage function today. Two-thirds of the approximate 1000 buildings were constructed as storage facilities. About two-thirds of the existing building stock was built during World War II, with the remainder in nearly equal numbers from before and after the war. Two wood-frame farmhouses and one stone house remain on depot property from the pre-military use of this area. Only the stone house (ca. 1850) remains on its original site.

There are no Category I properties at Savanna. The Beaty House, a stone structure built around 1850, is the only Category II structure. Twenty-three igloo-style earth-covered magazines in "C" area are Category III properties. The Igloos which were among the first of their kind built in 1929 may be the only remaining of this type in Army ownership. Other Category III buildings at Savanna include: the major surviving structures built during the installations' first half decade, World War II era buildings in the 600 area associated with the Bomb Loading Plant which armed the bombs used in General James Doolittle's raid on Tokyo, and World War II era barracks designed from the Army's standardized 700 series plans.

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PREFACE

This report represents the results of an historic properties survey of Savanna Army Depot Activity. Prepared for the United States Army Materiel Development and Readiness Command (DARCOM), the report is intended to assist the Army in bringing this installation into compliance with the National Historic Preservation Act of 1966 and its amendments, and related federal laws and regulations. To this end, the report focuses on the identification, evaluation, documentation, nomination, and preservation of historic properties at Savanna. Chapter 1 sets forth the survey's scope and methodology; Chapter 2 presents an architectural, historical, and technological overview of the installation and its properties; and Chapter 3 identifies significant properties by Army category and sets forth preservation recommendations. Illustrations and an annotated bibliography supplement the text.

This report is part of a pilot program initiated through a memorandum of agreement between the National Park Service, Department of the Interior, and the U.S. Department of the Army. Savanna was one of five installations surveyed by HABS/HAER personnel in advance of a larger program to be undertaken by private contractors. The larger program covers 74 DARCOM installations and has two components: 1) a survey of historic properties (districts, buildings, structures, and objects), and 2) the development of archeological overviews. Stanley H. Fried, Chief, Real Estate Branch of Headquarters DARCOM, directed the program for the Army, and Dr. Robert J. Kapsch, Chief of the Historic American Buildings Survey/Historic American Engineering Record (HABS/HAER) directed the program for the National Park Service. Sally Kress Tompkins was program manager, and Robie S. Lange was

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project manager for the historic properties survey. Richard K. Anderson of the Historic American Engineering Record was project leader. The field work and this report was prepared by Wesley Shank (field supervisor), John Mecum and Debra Wolfe.

The complete HABS/HAER documentation for this installation will be included in the HABS/HAER collections at the Library of Congress, Prints and Photographs Division, under the designation HAER #IL-19.

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Chapter 1

INTRODUCTION

SCOPE

This report is based on an historic properties survey conducted in 1982 of all Army-owned properties located within the official boundaries of Savanna Army Depot Activity. The survey included the following tasks:

Completion of documentary research on the history of the installation and its properties.

Completion of a field inventory of all properties at the installation.

Preparation of a combined architectural, historical, and technological overview for the installation.

Evaluation of historic properties and development of recommendations for preservation of these properties.

Also completed as a part of the historic properties survey of the installation, but not included in this report, are 160 HABS/HAER Inventory cards. These cards, which constitute HABS/HAER Documentation Level IV, will be provided to the Department of the Army. Archival copies of the cards, with their accompanying photographic negatives, will be transmitted to the HABS/HAER collections at the Library of Congress. A National Register

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nomination has been completed for the Beaty House. The methodology used to complete these tasks is described in the following section of this report.

METHODOLOGY

1. Documentary Research

Savanna Army Depot Activity is a part of the U.S. Army Depot System Command (DESCOM), and the majority of its buildings and structures are used for storage purposes. Documentary research centered on the developmental history of Savanna and its role as an Army storage facility. The Illinois State Historic Preservation Office was contacted about possible historic properties at Savanna, but no historic properties were listed by this source.

Army records used for the field inventory included current Real Property Inventory (RPI) printouts that listed all officially recorded buildings and structures by facility classification and date of construction; the installation's property record cards; base maps and photographs supplied by installation personnel; and installation master planning, archaeological, and environmental assessment and related reports and documents. A complete listing of documentary material may be found in the bibliography.

2. Field Inventory

The field inventory was conducted by Wesley Shank, John Mecum and Debra Wolfe during the summer of 1982.

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Field inventory procedures were based on the HABS/HAER Guidelines for Inventories of Historic Buildings and Engineering and Industrial Structures¹. All areas and properties were visually surveyed. Building locations and approximate dates of construction were noted from the installations' property records and field-verified.

Field inventory forms were prepared for, and black and white 35 mm photographs taken of, all buildings and structures through 1945 except basic utilitarian structures of no architectural, historical, or technological interest. When groups of similar ("prototypical") buildings were found, one field form was normally prepared to represent all buildings of that type. Field inventory forms were also completed for representative post-1945 buildings and structures.² Information collected on the field forms was later evaluated, condensed, and transferred to HABS/HAER Inventory cards.

3. Historic Overview

A combined architectural, historical, and technological overview was prepared from information developed from the documentary research and the field inventory. It was written in two parts: 1) an introductory description of the installation, and 2) a history of the installation by periods of development, beginning with pre-military land uses.

The objectives of the overview were to 1) establish the periods of major construction at the installation, 2) identify important events and individuals associated with specific historic properties, 3) describe

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patterns and locations of historic property types, and 4) analyze specific building and industrial technologies employed at the installation.

4. Property Evaluation and Preservation Measures

Based on information developed in the historic overviews, properties were first evaluated for historic significance in accordance with the eligibility criteria for nomination to the National Register of Historic Places. These criteria require that eligible properties possess integrity of location, design, setting, materials, workmanship, feeling, and association, and that they meet one or more of the following:³

- A. Are associated with events that have made a significant contribution to the broad patterns of our history;
- B. Are associated with the lives of persons significant in the nation's past;
- C. Embody the distinctive characteristics of a type, period or method of construction, represent the work of a master, possess high artistic values, or represent a significant and distinguishable entity whose components may lack individual distinction;
- D. Have yielded, or may be likely to yield, information important in pre-history or history.

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Properties thus evaluated were then placed in one of the five Army property categories as described in Army Regulation 420-40⁴:

Category I	Properties of major importance
Category II	Properties of importance
Category III	Properties of minor importance
Category IV	Properties of little or no importance at this time
Category V	Properties detrimental to the significance of adjacent historic properties

Based on an extensive review of the architectural, historical, and technological resources identified on DARCOM installations nationwide, four criteria were developed to help determine the appropriate categorization level for each Army property. These criteria were used to assess the importance not only of properties of traditional historical interest, but of the vast number of standardized or prototypical buildings, structures, and production processes that were built and put into service during World War II, as well as of properties associated with many post-war technological achievements. The four criteria were often used in combination and are as follows:

- 1) Degree of importance as a work of architectural, engineering, or industrial design. This criterion took into account the qualitative factors by which design is normally judged: artistic merit, workmanship, appropriate use of materials, and functionality.

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- 2) Degree of rarity as a remaining example of a once widely used architectural, engineering, or industrial design or process. This criterion was applied primarily to the many standardized or prototypical DARCOM buildings, structures, or industrial processes. The more widespread or influential the design or process, the greater the importance of the remaining examples of the design or process was considered to be. This criterion was also used for non-military structures such as farmhouses and other once prevalent building types.

- 3) Degree of integrity or completeness. This criterion compared the current condition, appearance, and function of a building, structure, architectural assemblage, or industrial process to its original or most historically important condition, appearance, and function. Those properties that were highly intact were generally considered of greater importance than those that were not.

- 4) Degree of association with an important person, program, or event. This criterion was used to examine the relationship of a property to a famous personage, wartime project, or similar factor that lent the property special importance.

The majority of DARCOM properties were built just prior to or during World War II, and special attention was given to their evaluation. Those that still remain do not often possess individual importance, but collectively they represent the remnants of a vast construction undertaking whose architectural, historical, and technological importance needed to be

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assessed before their numbers diminished further. This assessment centered on an extensive review of the military construction of the 1940-1945 period, and its contribution to the history of World War II and the post-war Army landscape.

Because technology has advanced so rapidly since the war, post-World War II properties were also given attention. These properties were evaluated in terms of the Nation's more recent accomplishments in weaponry, rocketry, electronics, and related technological and scientific endeavors. Thus the traditional definition of "historic" as a property 50 or more years old was not germane in the assessment of either World War II or post-war DARCOM buildings and structures; rather, the historic importance of all properties was evaluated as completely as possible regardless of age.

Property designations by category are expected to be useful for approximately ten years, after which all categorizations should be reviewed and updated.

Following this categorization procedure, Category I, II, and III historic properties were analyzed in terms of:

- o Current structural condition and state of repair. This information was taken from the field inventory forms and photographs, and was often supplemented by rechecking with facilities engineering personnel.

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- o The nature of possible future adverse impacts to the property. This information was gathered from the installation's master planning documents and rechecked with facilities engineering personnel.

Based on the above considerations, the general preservation recommendations presented in Chapter 3 for Category I, II, and III historic properties were developed. Special preservation recommendations were created for individual properties as circumstances required.

5. Report Review

Prior to being completed in final form, this report was subjected to an in-house review. It was then sent in draft to the subject installation for comment and clearance. When the installation cleared the report, additional draft copies were sent to DARCOM, the appropriate State Historic Preservation Officer, and, when requested, to the archeological contractor performing parallel work at the installation. The report was revised based on all comments collected, then published in final form.

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NOTES

1. Historic American Buildings Survey/Historic American Engineering Record, National Park Service, Guidelines for Inventories of Historic Buildings and Engineering and Industrial Structures (unpublished draft, 1982).
2. Representative post-World War II buildings and structures were defined as properties that were: (a) "representative" by virtue of construction type, architectural type, function, or a combination of these, (b) of obvious Category I, II, or III historic importance, or (c) prominent on the installation by virtue of size, location, or other distinctive feature.
3. National Park Service, How to Complete National Register Forms (Washington, D.C.: U.S. Government Printing Office, January 1977).
4. Army Regulation 420-40, Historic Preservation (Headquarters, U.S. Army: Washington, D.C., 15 April 1984).

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HISTORICAL OVERVIEW

BACKGROUND

The Savanna Army Depot Activity covers 13,062 acres in Carroll and Jo Daviess Counties, Illinois, and is located in an area approximately eight miles northwest of the town of Savanna. Bounded on the southwest by the Mississippi River, on the northeast by the Burlington Railroad, and on the southeast by the Apple River, the depot extends toward the northwest for approximately thirteen miles and varies in width from one to four miles.

No persons of great historical significance were found to be associated with the buildings of this installation. One interesting figure in recent history who has an indirect link to the depot is General James Doolittle. According to U.S. Army sources, the bombs for his World War II air raid on Tokyo were loaded in the Bomb Loading Plant here¹.

The majority of buildings are earth-covered ammunition storage facilities and were constructed during World War II. In the World War II industrial plants the original equipment has been removed and in cases replaced with newer and different equipment; some buildings were put to other uses or left vacant. It appears that these plants followed a standard construction technology. Foundations and floors were of reinforced concrete. The structural system was a steel frame in which wide-flange columns were partially encased in a concrete cover so that the outside faces of the flanges were left exposed.

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The roof was framed in steel, walls were curtains of hollow structural-clay tile units, and roofs were corrugated cement-asbestos sheets. In the event of an explosion in such a building, presumably the steel load-carrying framework of columns and spanning overhead construction would be strong enough to remain intact, and the brittle wall and roof materials would shatter as they were blown outward. In some locations, reinforced concrete barricade walls a foot or more in thickness subdivided buildings. In other locations heaped earth barricades with one concrete face, and heavy-timber sand-filled barricades were used to deflect possible explosions. In some of these plants buildings are interconnected by walled and roofed walkways.

The several red brick buildings of 1918 grouped on the "Hill" - the Commanding Officer's Quarters, Officers' Quarters, Mens Barracks, Administration Building and Hospital - show a degree of Craftsman-style influence in their design, possibly distinguishing their appearance from similar contemporary buildings on the East Coast of the United States.

INITIAL CONSTRUCTION, 1918-1920

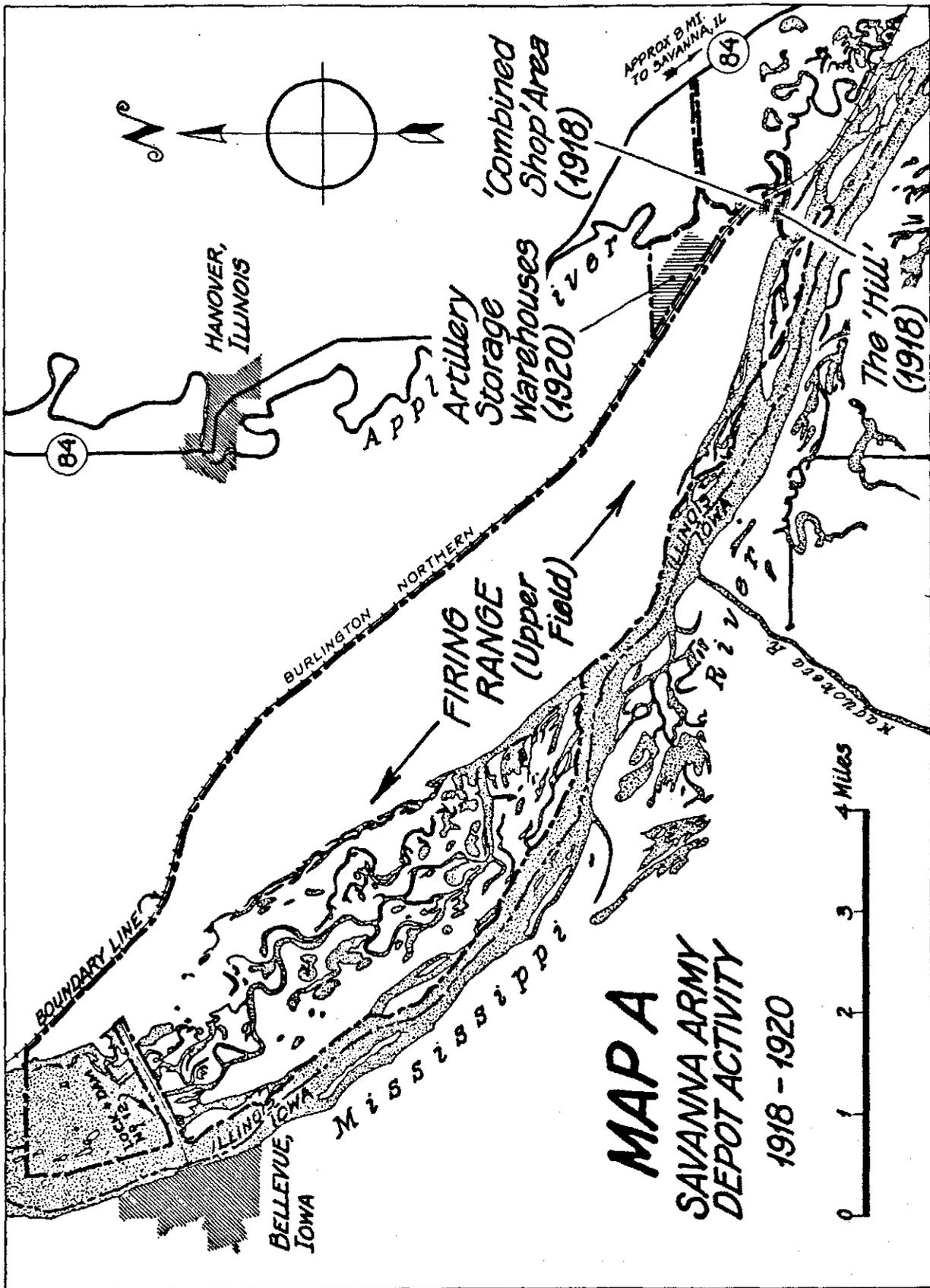
The history of the first phase of construction on the depot begins with the Sundry Civil Act passed by Congress on June 12, 1917; this legislation appropriated one and a half million dollars for the establishment of a proof-firing facility for the testing of artillery and ammunition manufactured throughout the mid-West².

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The Commanding Officer at Rock Island Arsenal, Colonel George W. Burr, was authorized to purchase the land and make the necessary improvements for such a facility. H.E. Curtis of Rock Island, acting as the Government agent, purchased parcels of land to comprise the proving ground and deeded it to the United States Government. The area lies sixty miles north of Rock Island, Illinois, and was considered particularly suited for proof firing because of its topography and location.

The area had previously been used for farming and was referred to locally as "Sand Prairie". Of the several farmhouses and associated structures on the land in 1917, only two wood-frame farmhouses and one stone house survive. The wooden buildings, although on depot land, are not at their original locations. The stone house dates from ca. 1850, is associated with early settlement of the locality, and is a typical example of stone farmhouses for this part of the Midwest at that time.

Construction at the Proving Ground began in April 1918 and was concentrated in the two areas presently referred to as the "Hill" and the "Combined Shop" area (See Map A). Major Waldman and First Lieutenants Lane and French, all stationed at Rock Island, prepared tentative master plans for the depot which were later revised by Captain Charles C. Chase, construction officer for the Savanna project³. Buildings on the "Hill" included the commanding officer's residence, officers' quarters, men's barracks, administration building, hospital, and Boulenge Instrument building. The "Combined Shop" area included an ammunition storage house, instrument house, garages, vehicle storage



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warehouse, engine house, and several firing points. Most of these buildings are still standing. In 1970 the firing points were converted into a lumber shed by the addition of a metal framework supporting a continuous roof.

Savanna Proving Ground was officially opened on December 26, 1918, although proof-firing activity had already begun in September of that year. As World War I drew to a close, however, the need for proof firing diminished, and facilities were required to store artillery vehicles, trucks, and tanks used during the War or that were ready for shipment from the United States but no longer needed overseas. In March 1919, the Chief of the Army's Construction Division, Brig. Gen. R.C. Marshall, authorized the construction of forty artillery storage warehouses at Savanna to help meet this demand. Completed in 1920, each warehouse had a heavy timber frame with walls and roof of corrugated metal siding. Fifteen of these buildings remain today, arranged in six parallel rows in "H" area.

BETWEEN THE WARS, 1921-1937

Savanna Proving Ground was officially separated from Rock Island Arsenal on March 5, 1921 and renamed Savanna Ordnance Depot, but little further construction took place there until late in the 1920s⁴. The second phase in the history of construction on the depot began in 1921. The "Hill" and the "Combined Shop" area previously developed was a small area at the southeast extreme of the depot property; the area to be developed at this time was called the "Upper Field", the large area of land to the northwest of the first development. Here forty-seven standard ammunition magazines and thirty high

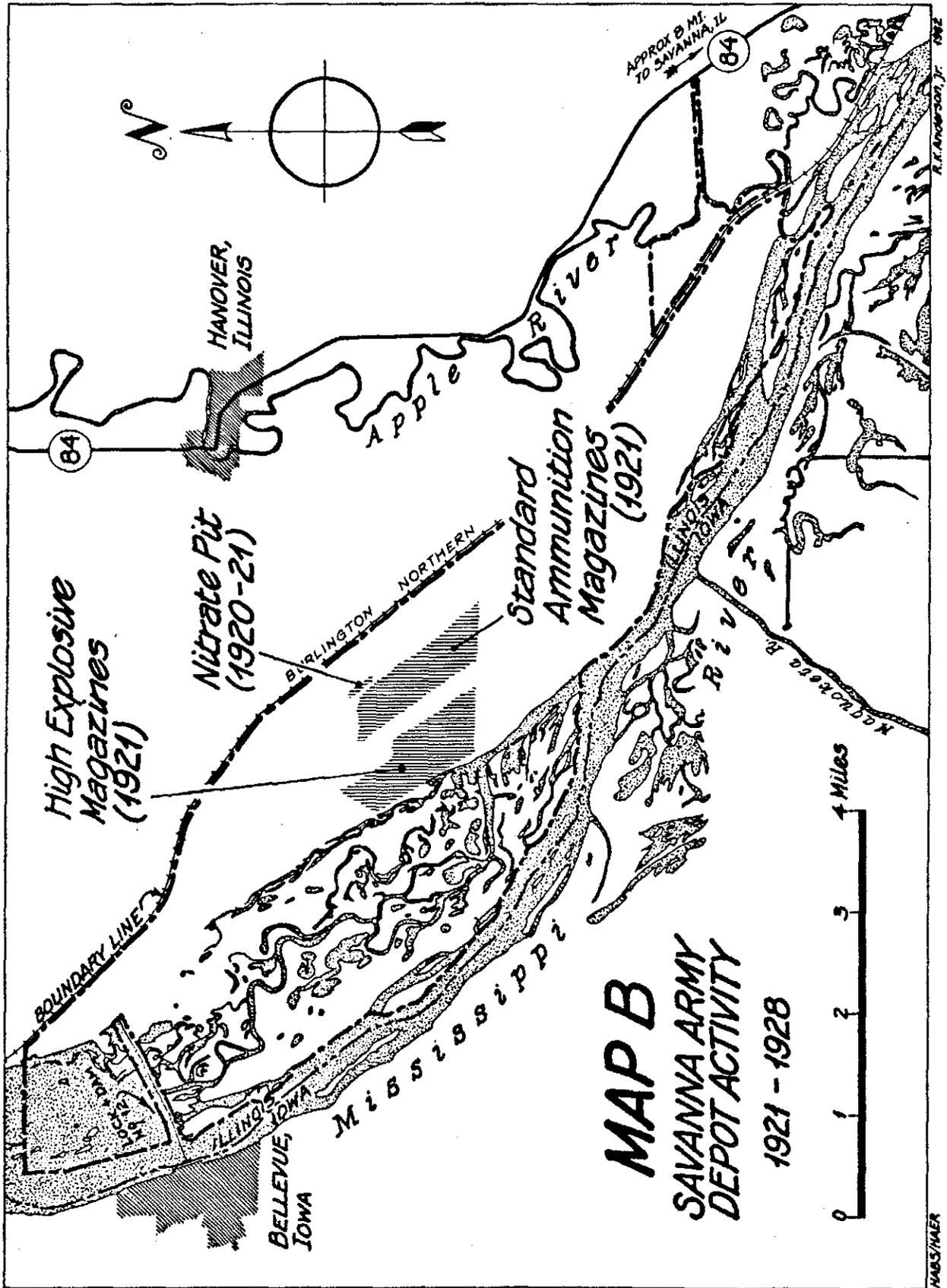
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explosive magazines were built, each type in its separate designated area, served by a system of railroad tracks connected to the former Chicago, Burlington, and Quincy (now Burlington Northern) line (see Map B). The standard ammunition magazines were constructed of hollow structural clay tile and arranged in parallel rows with a railroad spur and a road serving each row. A 400-foot space separated each magazine from surrounding ones so that the explosion of any one magazine would not endanger the rest. The high explosive magazines, smaller in size, were similarly arranged and constructed, but with an 800-foot separation.

Another element in the second phase of construction was the Nitrate Storage Pit, built to hold 260,000 tons of sodium nitrate for war reserves that had previously been stored at numerous locations throughout the country. Situated near the standard ammunition magazines, this reinforced concrete pit is 9'-6" deep and measures 234' by 1634' at its rim.

Additional construction in the Upper Field in 1921 included repacking houses, guard houses, a field office, and a deep well and water pumping station. Back at the Hill area, three barracks and three family houses were also constructed.

In 1926, a disastrous lightning-caused explosion destroyed the Navy ammunition depot at New Denmark, New Jersey, and set in motion a series of events which led to an important phase in the history of construction at the Savanna depot in 1929. As a result of the disaster, a committee composed of Army and Navy officials was authorized by Congress to study ammunition storage conditions throughout the United States. The committee found Savanna Ordnance Depot to



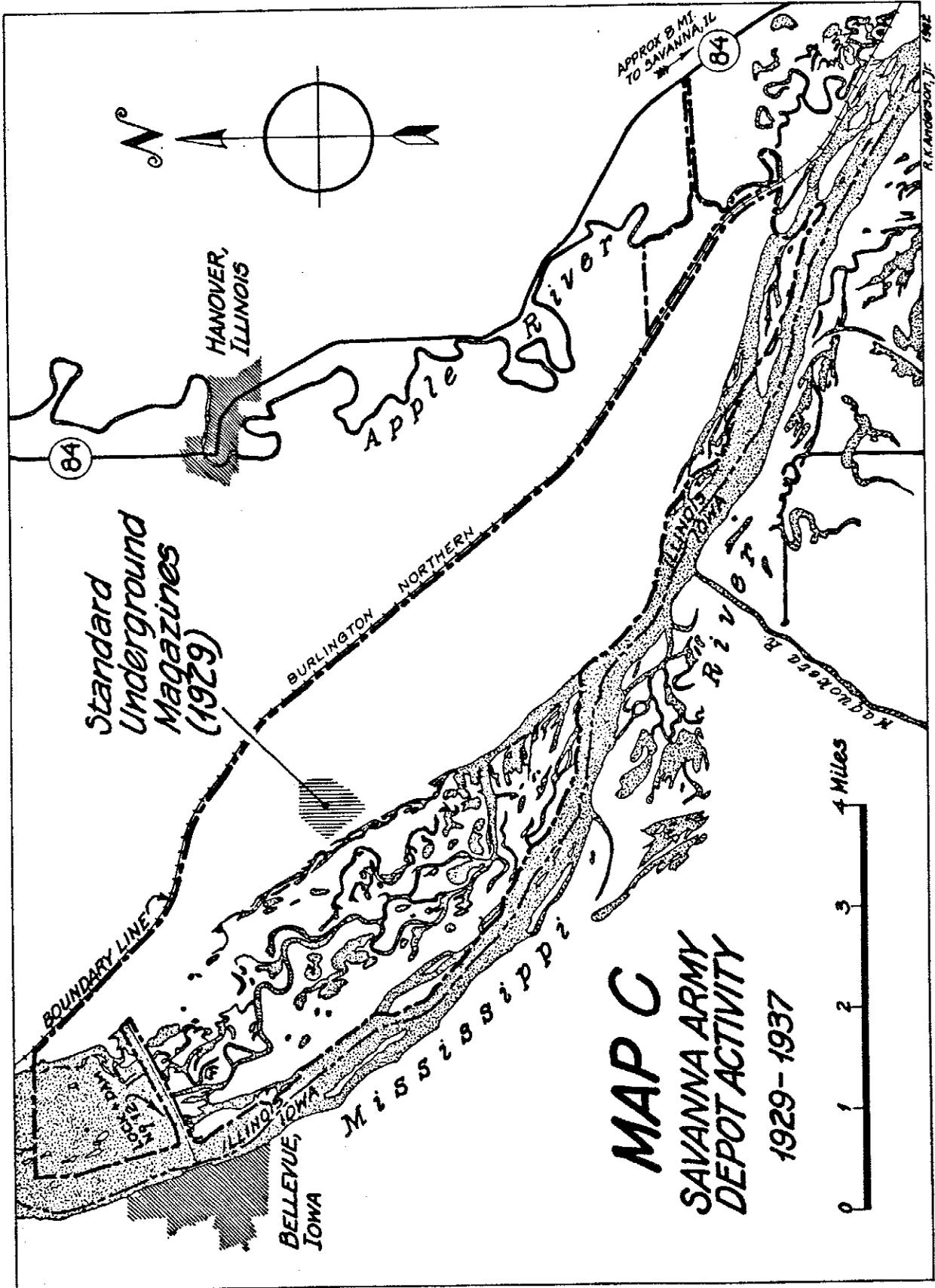
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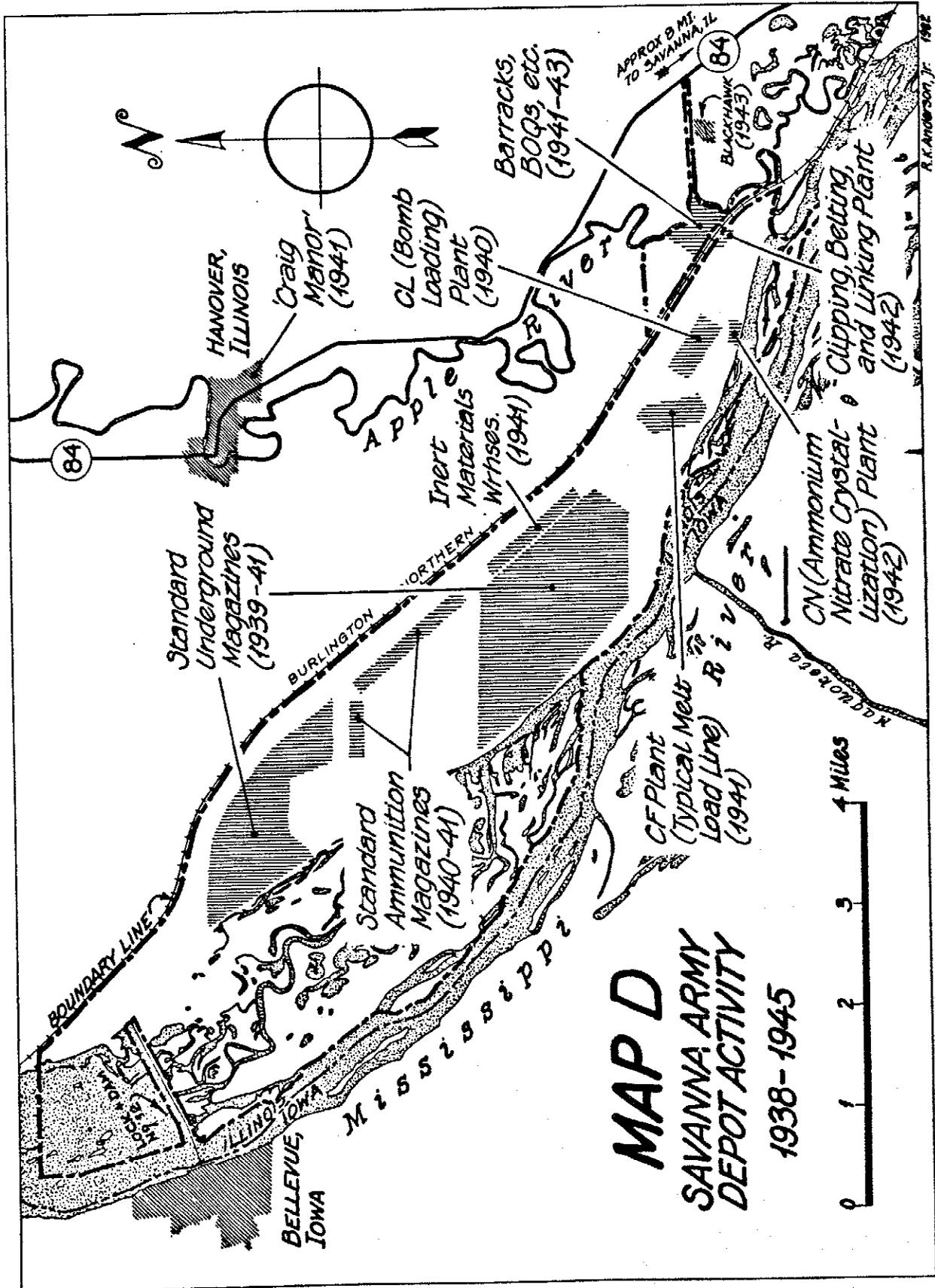
be particularly well suited for the storage of high explosives and recommended an expansion of the facilities to accommodate ammunition from the east coast depots where ammunition storage had become too concentrated. The Ordnance Department followed through on this recommendation by constructing twenty-four igloo-style earth-covered magazines at Savanna in 1929⁵. Among the first of that type to be constructed, the magazines, arranged in parallel rows, were considered safer than the standard ammunition magazines because they were designed to direct explosions upward rather than outward, thus preventing detonation of adjacent magazines in the event of an explosion. One of these earliest igloos was destroyed by an explosion in 1949; twenty-three remain in what is now designated 'C' area (See Map C).

After a small plant for the renovation and loading of ammunition was added to the ammunition storage area in 1931, there was little construction at the depot until 1938.

WARTIME EXPANSION, 1938-1945

World War II and the preparations leading up to American involvement in it were directly associated with the most significant phase in the history of construction at Savanna Ordnance Depot. This phase, spanning from 1938 to 1942, was the most intensive period of construction in the history of the depot and resulted in three groups of new facilities: (1) ammunition storage, (2) industrial plants, and (3) housing, service, and miscellaneous facilities. A total of 1,377,937 square feet of ammunition storage space was added during these years (See Map D).





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In 1939 and 1940 the depot built 194 igloo-style earth-covered magazines which were a larger and improved version of those built in 1929. Two hundred and thirteen more of these new magazines were added in 1941. Like the earlier magazines, these were arranged in parallel rows with spacing designed to reduce the danger of multiple explosions. These 407 igloos, except for one destroyed by an explosion in 1948, now comprise 'E' and 'F' areas and part of 'J' area. In addition, fifty-five standard ammunition magazines similar to those built in 1921 were constructed in 1940 and 1941 in what is now the 'A' area.

Construction of the Bomb Loading Plant (presently referred to as the Group III Load Line or CL Plant) took place from 1939 to 1940. After careful attention to safety and production strategies, the initial twelve buildings were laid out and interconnected with enclosed ramps through which materials were moved by battery-powered tow trucks. The plant was a prototype for other bomb-loading plants later built throughout the country⁶. The plant loaded bombs with explosives during World War II, including the bombs used in General James Doolittle's raid on Tokyo in 1942. After World War II, the loading equipment was removed and the plant reused for the demilitarization, renovation and modification of ammunition during the Korean War. Since that time it has housed occasional ammunition renovation and surveillance activities.

The Typical Melt Load Line, constructed in 1942, was the second industrial plant to be built during this phase of construction. Initially the plant consisted of twenty-nine interconnected buildings in their own distinct

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separated area of the depot. In this plant fixed-round ammunition was loaded with explosives. It too was developed as a prototype, and its layout rationale and transportation system were similar to that used in the Bomb Loading Plant⁷. The loading equipment was removed at the close of World War II and new equipment installed during the Korean War. Like the Bomb Loading Plant, these buildings have since been used for various ammunition and surveillance activities.

Though complete in 1942, the third industrial plant, the Ammonium Nitrate Crystallization Plant, was never operated as planned because ammonium nitrate usage was discontinued when the plant was completed. Designed with various safety and production features in mind and located in their own separated area, the buildings were instead used for miscellaneous storage and ammunition inspection.

The Clipping, Belting, and Linking Plant (the fourth plant) was completed in 1942 near the Combined Shop Area and used for packaging small arms ammunition. It consisted of two buildings: the packaging plant, since converted to an administration building, and a change house, now used as the security headquarters.

Thirty-seven buildings of temporary construction were erected in 1941 as part of a Unit Training Center. With quarters for 945 enlisted men and 40 officers, the complex included fifteen temporary barracks, five mess halls, six recreation buildings, officers' quarters, a post exchange, guard house, two storehouses, and an administration building. Most of these buildings are still standing and are presently used by the Reserves and National Guard.

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A hospital complex was also constructed in 1941 which consisted of nine buildings connected by a series of closed and open walkways; only one of the buildings remain. Other buildings erected in 1941 include a fire and guard house, garage and shop building, a field office in the ammunition area, transfer platforms, and guard houses. As a result of the great expansion taking place, the Diesel Generating Plant was constructed in 1941, and a new administration building, still used today as the Headquarters Building, was completed in 1942.

Concurrent with this expansion of facilities, the number of depot employees mushroomed from 143 in 1939 to 7,195 in 1942. To help meet the severe housing shortage, the Federal Works Administration built a 200-family housing project, "Craig Manor", in Hanover, Illinois, seven miles north of the depot. This 1941 project was followed in 1943 by two more housing projects: the village of Blackhawk, built by the Federal Public Housing Authority just one-half mile east of the depot's main gate, and some civilian war housing just inside the same gate. The village of Blackhawk was turned over to the depot in 1948 and subsequently sold to the City of Savanna in 1976 (most of the housing is now demolished). The civilian war housing included twelve dormitory buildings, six of which survive; three recreation buildings, of which two survive; and a mess hall, which has been demolished.

POST WORLD WAR II, 1946-1982

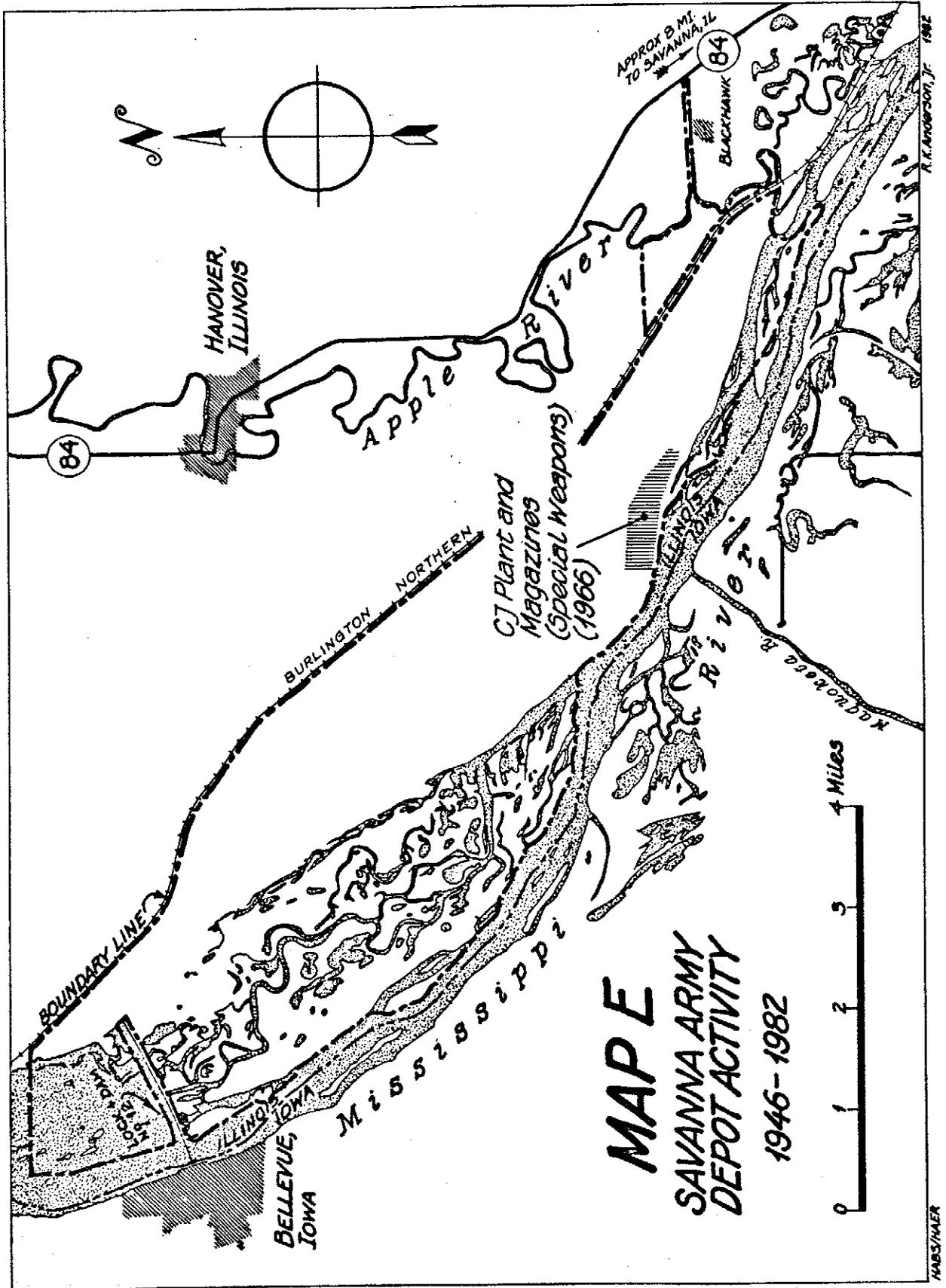
Activity at the depot decreased somewhat at the close of World War II but rose again during the Korean War, which marks the beginning of the last phase of

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the history of construction at the depot. The Typical Melt Load Line was modernized and equipped to load both fixed and semi-fixed shells in sizes through 105 mm, while the Bomb Loading Plant was used for the demilitarization (i.e. deactivation), renovation, and modification of ammunition. The Ammonium Nitrate Crystallization Plant was used for ammunition inspection. In 1950, the Ordnance Ammunition, Surveillance, and Maintenance School was established to provide technical, operational, and administrative training in all fields of ammunition. A 1954 construction project was the present Brass Reclamation Plant which decontaminates and recovers brass, steel, and lead from small arms ammunition, along with some artillery components such as fuse bodies and primers.

Savanna Ordnance Depot was renamed Savanna Army Depot on August 1, 1962, after which it received a special weapons mission on January 1, 1966 and an authorization to construct facilities to support this mission. Eight yurt-style magazines were constructed along with a check and assembly building, warehouse, and guard house. This area, fenced and designated 'J' area, also included the former Liquid Propellant Storage Area, constructed in 1957, and twenty-three earth-covered magazines annexed from 'E' area. A new special weapons workshop was completed in 1970, and the special weapons mission was terminated in 1975 (See Map E).

The DARCOM (U.S. Army Materiel Development and Readiness Command) Ammunition Center was established at the depot in July, 1971. It was redesignated the U.S. Army Defense Ammunition Center and School in 1979, and it presently provides technical, logistical, consultant, engineering, training, and other



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specialized ammunition services to the Department of Defense. On July 1, 1976, the depot was placed under DESCOM (Depot System Command), with headquarters at Letterkenny Army Depot, Chambersburg, Pennsylvania, and renamed Savanna Army Depot Activity. The depot's current responsibilities include: the receipt, storage, support, issue, and demilitarization of conventional ammunition; the receipt, storage, and maintenance of strategic and critical materials; and the manufacture, maintenance, and issue of Ammunition Peculiar Equipment and related repair parts.

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NOTES

- 1 "DARCOM Installation and Activity Brochure". U.S. Army, 31 Dec. 1976. (Reports Control Symbol DRCIS-102 (R1)). p. 2.
- 2 Ibid., p. 1.
- 3 War Department, Office of the Constructing Officer. "Completion Report, Savanna Proving Ground." Savanna, Illinois, 1918.
- 4 "DARCOM Installation and Activity Brochure." op. cit., p. 1.
- 5 Thomson, Harry C., and Lida Mayo. United States Army in World War II. The Technical Services. The Ordnance Department: Procurement and Supply. Washington, D.C.: Office of the Chief of Military History, 1960. pp. 360-361.
- 6 "Fact Sheet: Austere Reactivation of CL Plant." No date. (Typewritten) In Facilities Engineering Office records, Savanna Army Depot Activity.
- 7 "Fact Sheet: Austere Reactivation of CF Plant." No date. (Typewritten) In Facilities Engineering Office records, Savanna Army Depot Activity.

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Chapter 3

PRESERVATION RECOMMENDATIONS

BACKGROUND

Army Regulation 420-40 requires that an historic preservation plan be developed as an integral part of each installation's planning and long range maintenance and development scheduling.¹ The purpose of such a program is to:

- o Preserve historic properties to reflect the Army's role in history and its continuing concern for the protection of the Nation's heritage.
- o Implement historic preservation projects as an integral part of the installation's maintenance and construction programs.
- o Find adaptive uses for historic properties in order to maintain them as actively used facilities on the installation.
- o Eliminate damage or destruction due to improper maintenance, repair, or use that may alter or destroy the significant elements of any property.
- o Enhance the most historically significant areas of the installation through appropriate landscaping and conservation.

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To meet these overall preservation objectives, the general preservation recommendations set forth below have been developed:

Category I Historic Properties

All Category I historic properties not currently listed on or nominated to the National Register of Historic Places are assumed to be eligible for nomination regardless of age. The following general preservation recommendations apply to these properties:

- a) Each Category I historic property should be treated as if it were on the National Register, whether listed or not. Properties not currently listed should be nominated. Category I historic properties should not be altered or demolished. All work on such properties shall be performed in accordance with Sections 106 and 110(f) of the National Historic Preservation Act as amended in 1980, and the regulations of the Advisory Council for Historic Preservation (ACHP) as outlined in the "Protection of Historic and Cultural Properties" (36 CFR 800).

- b) An individual preservation plan should be developed and put into effect for each Category I historic property. This plan should delineate the appropriate restoration or preservation program to be carried out for the property. It should include a maintenance and repair schedule and estimated initial and annual costs. The

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preservation plan should be approved by the State Historic Preservation Officer and the Advisory Council in accordance with the aboved referenced ACHP regulation. Until the historic preservation plan is put into effect, Category I historic properties should be maintained in accordance with the recommended approaches of the Secretary of the Interior's Standards for Rehabilitation and Revised Guidelines for Rehabilitating Historic Buildings² and in consultation with the State Historic Preservation Officer.

- c) Each Category I historic property should be documented in accordance with Historic American Buildings Survey/Historic American Engineering Record (HABS/HAER) Documentation Level II, and the documentation submitted for inclusion in the HABS/HAER collections in the Library of Congress.³ When no adequate architectural drawings exist for a Category I historic property, it should be documented in accordance with Documentation Level I of these standards. In cases where standard measured drawings are unable to record significant features of a property or technological process, interpretive drawings also should be prepared.

Category II Historic Properties

All Category II historic properties not currently listed on or nominated to the National Register of Historic Places are assumed to be eligible for nomination regardless of age. The following general preservation recommendations apply to these properties:

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- a) Each Category II historic property should be treated as if it were on the National Register, whether listed or not. Properties not currently listed should be nominated. Category II historic properties should not be altered or demolished. All work on such properties shall be performed in accordance with Sections 106 and 110(f) of the National Historic Preservation Act as amended in 1980, and the regulations of the Advisory Council for Historic Preservation (ACHP) as outlined in the "Protection of Historic and Cultural Properties" (36 CFR 800).
- b) An individual preservation plan should be developed and put into effect for each Category II historic property. This plan should delineate the appropriate preservation or rehabilitation program to be carried out for the property or for those parts of the property which contribute to its historical, architectural, or technological importance. It should include a maintenance and repair schedule and estimated initial and annual costs. The preservation plan should be approved by the State Historic Preservation Officer and the Advisory Council in accordance with the above referenced ACHP regulations. Until the historic preservation plan is put into effect, Category II historic properties should be maintained in accordance with the recommended approaches in the Standards for Rehabilitation and Revised Guidelines for Rehabilitating Historic Buildings⁴ and in consultation with the State Historic Preservation Officer.

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- c) Each Category II historic property should be documented in accordance with Historic American Buildings Survey/Historic American Engineering Record (HABS/HAER) Documentation Level II, and the documentation submitted for inclusion in the HABS/HAER collections in the Library of Congress.⁵

Category III Historic Properties

The following preservation recommendations apply to Category III historic properties:

- a) Category III historic properties listed on or eligible for nomination to the National Register as part of a district or thematic group should be treated in accordance with Sections 106 and 110(f) of the National Historic Preservation Act as amended in 1980, and the regulations of the Advisory Council for Historic Preservation as outlined in the "Protection of Historic and Cultural Properties" (36 CFR 800). Such properties should not be demolished and their facades, or those parts of the property that contribute to the historical landscape, should be protected from major modifications. Preservation plans should be developed for groupings of Category III historic properties within a district or thematic group. The scope of these plans should be limited to those parts of each property that contribute to the district or group's importance. Until such plans are put into effect, these properties should be maintained in accordance with the recommended approaches in the Secretary of the

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Interior's Standards for Rehabilitation and Revised Guidelines for Rehabilitating Historic Buildings⁶ and in consultation with the State Historic Preservation Officer.

- b) Category III historic properties not listed on or eligible for nomination to the National Register as part of a district or thematic group should receive routine maintenance. Such properties should not be demolished, and their facades, or those parts of the property that contribute to the historical landscape, should be protected from modification. If the properties are unoccupied, they should, as a minimum, be maintained in stable condition and prevented from deteriorating.

HABS/HAER Documentation Level IV has been completed for all Category III historic properties, and no additional documentation is required as long as they are not endangered. Category III properties that are endangered for operational or other reasons should be documented in accordance with HABS/HAER Documentation Level III, and submitted for inclusion in the HABS/HAER collections in the Library of Congress.⁷ Similar structures need only be documented once.

CATEGORY I PROPERTIES

There are no Category I properties at Savanna Army Depot Activity.

CATEGORY II PROPERTIES

Beaty House (Building 2212)

- * Background and significance. The Beaty House (or Old Stone House) is the only stone structure of the three buildings which remain on depot property from the pre-military period. In addition, it is the only pre-military structure which is still on its original site. A typical midwestern stone farmhouse of the mid-19th century, the Beaty House was constructed ca. 1850 on property purchased from the federal government by Martin Beaty, an early settler, in 1845. The house was owned by the Beaty family until 1900, when it was sold to the last private owner, Robert Martin. Martin sold the property to the United States in 1918. The main portion of the house is of rubble stone construction with a wood-frame addition to the rear. The front portion is two stories, the rear less than a full two stories, and the rear addition is one story. Originally a handsome three-bay, two-story wooded porch ran the length of the building's front. At some point after 1922 the two side bays of the front porch were removed. This property is eligible for listing on the National Register because it possesses sufficient integrity of location, design, materials, workmanship and association; is associated with early settlement history; and embodies the distinctive characteristics of a midwestern farmhouse of this period.

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The James Beaty House (Building #2212). Source: Field inventory photographs, roll #14, frame #24 (top) and roll #14, frame #29 (bottom). John Mecum and Wesley Shank, photographers. 1982.

- * The Beaty House is important for its association with a family of early settlers, the Beaty family. It is a good example of a typical midwestern stone farmhouse from the mid-19th century and helps to illustrate the pre-military land-use patterns of this region. For these reasons the Beaty House is a Category II property.

- * Condition and potential adverse impacts. The building is currently in a deteriorating condition. The roof leaks, the front porch has collapsed, and parts of interior floors are rotting from exposure to rain. The windows are boarded up and sashes are badly deteriorated. The thick stone walls are in good shape, with no loose stones, crumbling mortar, or settlement cracks.

- * Preservation recommendations. Refer to the general preservation recommendations at the beginning of this chapter for Category III properties eligible for listing on the National Register.

CATEGORY III PROPERTIES

Twenty-Three Igloo-Style Earth-Covered Magazines (Buildings #C101 to #C703)

- * Background and significance. Constructed in 1929, these structures were designed to correct safety deficiencies in earlier types of explosives storage facilities. Following a disastrous series of explosions caused by lightning in 1926 at a U.S. Navy ammunition depot in New Denmark, New Jersey, this design was produced. These

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magazines are earth-covered, reinforced concrete structures with one exposed wall that contains the entrance door. They consist of a reinforced concrete half-cylindrical vault with spring line at the floor level and vertical end walls. The interior space measures 26 feet wide by 40 feet long at floor level. Lightning rods and extensive grounding of all metal items was designed to prevent lightning from causing explosions. In addition, the magazines were spaced at a minimum distance of 400 feet from each other so that the explosion of any one magazine would not endanger the others. They are laid out in parallel rows along six parallel roads. Bermed areas for outdoor storage are filled in the area between most magazines. The success of this design may be assumed since thousands more were built during World War II (over 400 built at Savanna Army Depot alone). Although smaller groups of this prototype were also constructed in 1929 at Aberdeen Proving Ground, Delaware Ordnance Depot, and Benicia Ordnance Depot the Savanna magazines are believed to be the only remaining ones utilized in their original capacity (Delaware and Benicia having been deactivated, and those at Aberdeen do not appear on the installations real property list). Possessing minor importance as among the first of a widely used engineering design and as a good example of a highly intact engineering type these magazines are Category III properties.

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Igloo-Style Earth-Covered Magazine (Building #C-503). Source:
Field inventory photograph, roll #2, frame #18. John Mecum,
photographer. 1982.

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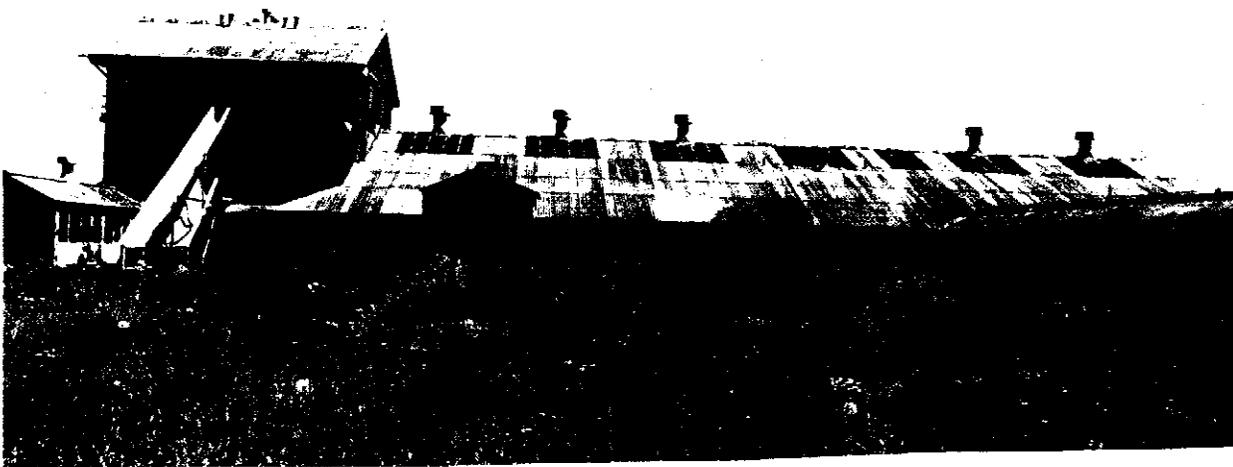
- * Condition and potential adverse impacts. Since the igloo-type magazine is an earth-covered structure, its complete condition is unknown. The heavy steel access doors and the surrounding exposed concrete wall is in good condition. The wooden retaining walls located to either side of the access door also appears to be in good condition. No modifications, additions, or demolition is anticipated for these structures.

- * Preservation recommendations. Refer to the general preservation recommendations at the beginning of this chapter for Category III historic properties not listed on the National Register.

Bomb Loading Plant (Buildings #601, 604, 613, 620, 628, 634, 641, 642)

- * Background and significance. The Bomb Loading Plant (or CL Plant) represents the World War II activities at Savanna. Built in 1940, 1941, and 1942 these buildings are significant because they served as a prototype for many other bomb loading plants built during World War II, and because of their role in loading the explosives in the bombs which General James Doolittle used in his raid on Tokyo in 1942. Although the buildings possess little architectural merit, being strictly plain and utilitarian, the plant layout to some extent reflects the internal industrial processes which took place here during the war. These buildings are Category III properties because they possess minor importance as the first of a widely used industrial design and process, and because of their limited association with an important event, the bombing raid on Tokyo.

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Melt and Pour Building (Building #634). Source: Field inventory photographs roll #5, frame #34 (top) and roll #6, frame #11 (bottom). John Mecum, photographer. 1982.

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- * Condition and potential adverse impacts. The general condition of the buildings is good, yet they do not contain any of their original machinery. They are presently on standby, pending future mobilization requirements.

- * Preservation options. Refer to the general preservation recommendations at the beginning of this chapter for Category III properties not listed on the National Register.

Old Proving Ground Firing Points (Building #125) and Boulenge Instrument House (Building #17)

- * Background and significance. An integral part of Savanna's initial role as proving ground, the firing points and the Boulenge Instrument building were both constructed in 1918. Until 1921 the reinforced concrete firing points were used to proof fire ammunition and the brick instrument house was used to direct and monitor the proof firing activities. These structures are Category III properties because as symbols of the installation's original mission they possess limited association with the mobilization which resulted from our involvement in World War I.

- * Condition and potential adverse impacts. Although converted to an open-air lumber shed the firing points are still intact. The small brick instrument house is also in good condition.

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Old Proving Ground Firing Points (Building #125) and Boulenge Instrument House (Building #17). Source: Field inventory photographs, roll #13, frame #18 (top) and roll #1, frame #16 (bottom). John Mecum, photographer. 1982.

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- * Preservation recommendations. Refer to the general preservation recommendations at the beginning of this chapter for Category III properties not listed on the National Register.

The Original "Hill" Complex (Buildings #9, 11, 12, 13, 20, 21, 22, 23)

- * Background significance. The original "Hill" complex consists generally of officers quarters, administrative buildings, and buildings now housing the Ammunition School all of which were built in 1918 or 1921. Their significance derives primarily from their relation to the installation as its oldest primary officers' quarters and administrative buildings. Although some of these buildings have received additions and minor alterations to their exteriors they are Category III properties because they present an image of the original appearance of the installation.
- * Condition and potential adverse impacts. These buildings are in good condition. For several instances minor wings have been added and porches have been enclosed. No adverse impacts are planned at this time.
- * Preservation recommendations. Refer to the general preservation recommendations at the beginning of this chapter for Category III properties not listed on the National Register.

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Mens Barracks (Building #9) and Administration Building
(Building #13). Source: Field inventory photographs, roll
#1, frame #1 (top) and roll #11, frame #32 (bottom). John
Mecum, photographer. 1982.

"700 Series" World War II Standardized Barracks, Mess and Chapel (Buildings
204, 206, 208, 210, 212, 214, 216, 218, 220, 250, 255)

- * Background and significance. As part of the early mobilization effort of World War II these properties were constructed in 1941. These buildings were part of the thirty-seven buildings of temporary construction erected in 1941 as part of the Unit Training Center. Approximately 1,000 enlisted men and officers were housed in the new buildings. These properties identified as Category III structures include the World War II temporary buildings constructed from the "700 Series" plans. These plans were prepared by the Army to allow rapid and cost effective planning and construction of adequate facilities during periods of rapid expansion. Although minor modifications have occurred, these buildings are Category III properties because they are good examples of a highly intact historic architectural assemblage.

- * Condition and potential adverse impacts. These frame buildings are in fair condition. Despite having been built as temporary structures forty years ago, there is no plan to demolish these structures.

- * Preservation recommendations. Refer to the general preservation recommendations at the beginning of this chapter for Category III properties not listed on the National Register.

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"700 Series" Standardized Chapel (Building #225) and Barracks (Building #214). Source: Field inventory photographs, roll #10, frame #12 (top) and roll #9, frame #14 (bottom). John Mecum, photographer. 1982.

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NOTES

1. Army Regulation 420-40, Historic Preservation (Headquarters, U.S. Army: Washington, D.C., 15 April 1984).
2. National Park Service, Secretary of the Interior's Standards for Rehabilitation and REvised Guidelines for Rehabilitating Historic Buildings, 1983 (Washington, D.C.: Preservation Assistance Division, National Park Service, 1983).
3. National Park Service, "Archeology and Historic Preservation; Secretary of the Interior's Standards and Guidelines," Federal Register, Part IV, 28 September 1983, pp. 44730-44734.
4. National Park Service, Secretary of the Interior's Standards.
5. National Park Service, "Archeology and Historic Preservation."
6. National Park Service, Secretary of the Interior's Standards.
7. National Park Service, "Archeology and Historic Preservation."

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