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Historic Landscape Survey, Maxwell AFB, Alabama

Megan W. Tooker, Ellen R. Hartman, and Adam D. Smith

August 2013

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Construction Engineering Research Laboratory
U.S. Army Engineer Research and Development Center
PO Box 9005
2902 Newmark Drive
Champaign, IL 61826-9005

Final report

Prepared for 42d Civil Engineer Squadron Environmental Office
Maxwell Air Force Base
Montgomery, AL 36112-5000

Under Project #370647, "Historic Landscape Contexts, Inventories, and Management Plans for Randolph AFB & Maxwell AFB."

Abstract

This document is an inventory and evaluation of the historic landscape features of Maxwell Air Force Base (AFB), Alabama. This document serves to meet the requirements for federal agencies to address their cultural resources, which are defined as any prehistoric or historic district, site, building, structure, or object. This report is especially relevant to Section 110 of the National Historic Preservation Act, which requires federal agencies to inventory and evaluate their cultural resources.

Maxwell AFB's historic development has resulted in several landscapes that are unique in their design and implementation. This report outlines the cultural influences that determined the physical layout and construction of Maxwell AFB, and then identifies several historic landscapes within the base. The report concludes with recommendations for the maintenance and preservation of the identified historic landscapes.

Contents

Figures and Tables

Figures

Tables

Preface

This study was conducted for the 42d Civil Engineer Squadron Environmental Office, Maxwell Air Force Base, Alabama, under Project #370647, "Historic Landscape Contexts, Inventories, and Management Plans for Randolph AFB & Maxwell AFB." The Maxwell AFB technical monitor was Deborah Tharp, Cultural Resources Specialist AFCEC-West Region and Lindsay Kennington, Maxwell AFB Cultural Resources Manager.

The work was performed by the Land and Heritage Conservation Branch (CN-C) of the Installations Division (CN), U.S. Army Engineer Research and Development Center – Construction Engineering Research Laboratory (ERDC-CERL). The ERDC Project Manager was Mr. Adam Smith.

At the time of publication, Dr. Christopher White was Chief, CEERD-CN-C; Ms. Michelle Hanson was Chief, CEERD-CN; and Mr. Alan Anderson was the Technical Director for Military Ranges and Lands, CEERD-CV-T. The Deputy Director of ERDC-CERL was Dr. Kirankumar Topudurti, and the Director was Dr. Ilker Adiguzel.

The Commander and Executive Director of ERDC was COL Jeffrey R. Eckstein, and the Director of ERDC was Dr. Jeffery P. Holland.

Unit Conversion Factors

Multiply	By	To Obtain
acres	4,046.873	square meters
feet	0.3048	meters
inches	0.0254	meters
miles (U.S. statute)	1,609.347	meters
square feet	0.09290304	square meters
square miles	2.589998 E+06	square meters
square yards	0.8361274	square meters
yards	0.9144	meters

Abbreviations

Term	Meaning
ACTS	Air Corps Tactical School
AEC	Army Environmental Command
AETC	Air Education and Training Command
AFB	Air Force Base
AFHRA	Air Force Historical Research Agency
AFR	Air Force Regulation
AU	Air University
BOQ	Bachelor Officers' Quarters
BX	Base Exchange
CADRE	College of Aerospace Doctrine, Research and Education
CERL	Construction Engineering Research Laboratory
CRMP	Cultural Resources Management Plan
CRP	Cultural Resources Plan
ERDC	Engineer Research and Development Center
MIPR	Military Interdepartmental Purchase Request
MRA	Multiple Resource Area
NARA	National Archives and Records Administration
NCO	non-commissioned officer
NHPA	National Historic Preservation Act of 1966
NPS	National Park Service
NRHP	National Register of Historic Places
OTS	Officer Training School
PX	Post Exchange
RAF	Royal Air Force
SEACTC	Southeast Air Corps Training Center
SOQ	Senior Officers' Quarters
TAC	Tactical Air Command
TR	Technical Report
USGS	U.S. Geological Survey
WWI	World War I
WWII	World War II

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1 Methodology

1.1 Background

Congress codified the National Historic Preservation Act of 1966 (NHPA)—the nation's most effective cultural resources legislation to date—in order to provide guidelines and requirements for preserving tangible elements of our past. The benefits derived from the NHPA resulted from a broader need to preserve historic cultural resources. These resources were identified primarily through the creation of the National Register of Historic Places (NRHP). Contained within the NHPA are Sections 106 and 110 which outline specific requirements for federal agencies to address their cultural resources. In the NHPA, cultural resources are defined as any prehistoric or historic district, site, building, structure, or object. Section 106 requires the determination of effect of federal undertakings on properties deemed eligible or potentially eligible for the NRHP. Section 110 requires federal agencies to inventory and evaluate their cultural resources.

Maxwell Air Force Base (AFB) is located in the upper Gulf Coastal Plain of Alabama. The base is situated on the southern, left-descending bank of the Alabama River at the northwestern edge of the City of Montgomery in Montgomery County, Alabama. The base consists of 2,475 acres and is bounded on the north by the Alabama River, to the south by Maxwell Boulevard, on the south and west by the Birmingham Highway, and to the east by the City of Montgomery.

Maxwell AFB is the headquarters of the Air University (AU) which is a major component of Air Education and Training Command (AETC). Maxwell AFB is also the U.S. Air Force's center for Joint Professional Military Education (JPME). The host wing for Maxwell AFB and Gunter Annex is the 42d Air Base Wing. The Air Force Reserve Command's 908th Airlift Wing and the subordinate 357th Airlift Squadron are tenant activities and the only operational flying wings at the base. Maxwell AFB is also the site of Federal Prison Camp, Montgomery (operated by the Bureau of Federal Prisons).

Figure 1 is a plan of Maxwell AFB in 1987 showing that the overall layout of the base continues to reflect the historic building and development phases.

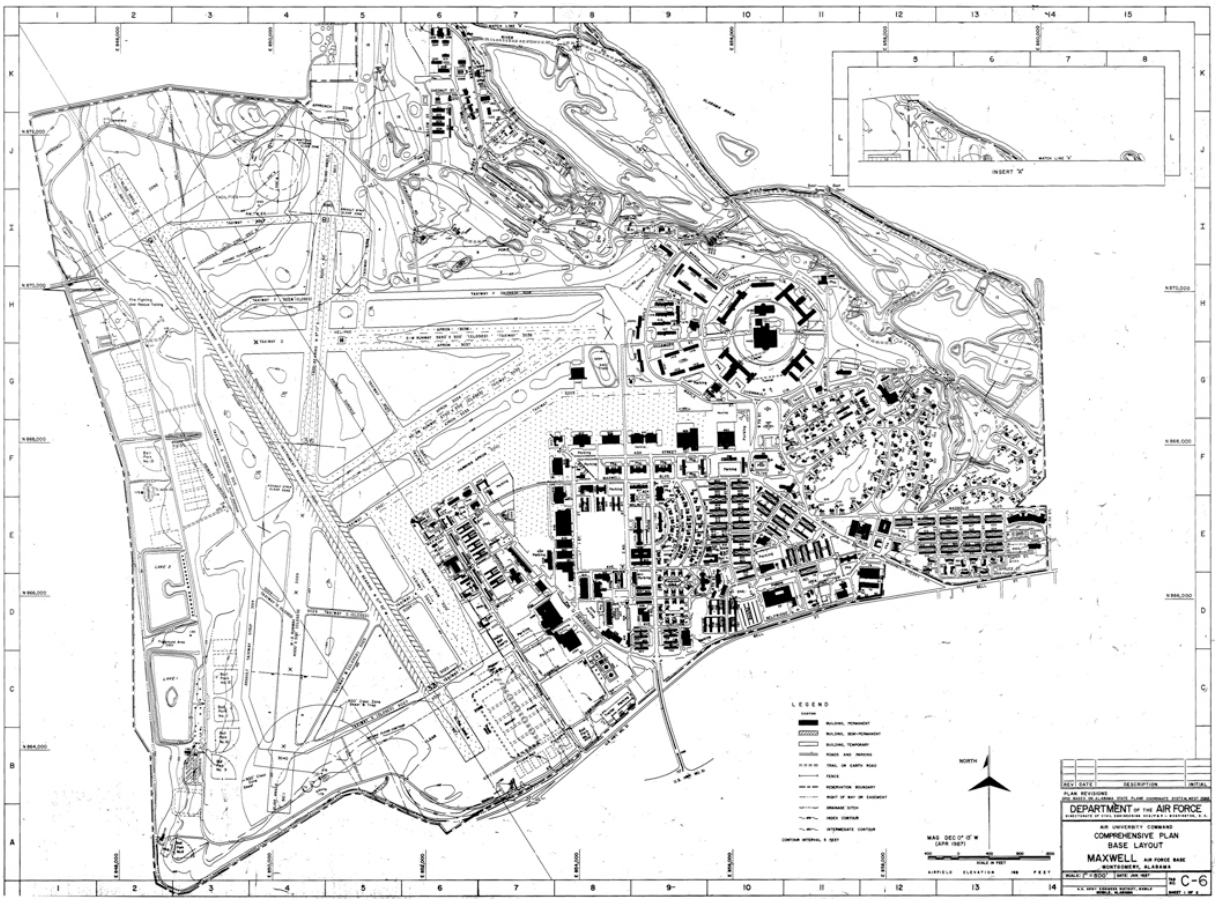

Figure 1. Area map of Maxwell AFB, 1987 (Maxwell AFB Cultural Resources).

1.2 Objectives

The objectives of this historic landscape evaluation are to complete archival research determining the original design and planning intentions for Maxwell AFB; inventory and document the landscape features; evaluate the landscape components and assess the landscape's eligibility for the NRHP; and then make recommendations for the preservation and maintenance of Maxwell AFB's historic landscapes.

1.3 Approach

For a property to qualify for the NRHP, it must meet at least one of the National Register Criteria for Evaluation, must be significantly associated

with an important historic context, and must retain sufficient integrity to convey its significance under that context.

This report establishes the process by which the historic landscapes of Maxwell AFB are inventoried and evaluated according to the criteria set forth for the NRHP. To be eligible or listed on the NRHP, cultural resources must meet certain requirements for establishing their importance to American history and heritage. The cultural importance of Maxwell's landscape is determined through the base's historic context. Next, using the historic context as a reference point, the physical site is analyzed and inventoried to determine the original design intentions. In doing this, the historic landscapes are identified and their features are documented through mapping, diagramming, and image collection. With this information, the historic qualities are determined and evaluated according to NRHP criteria. Finally, this process establishes the historic importance of the landscape and determines its historic integrity. Subsequently, analytical results allow recommendations to be made that are appropriate for the preservation and maintenance of the historic landscape features.

This report focuses on the historic landscape of Maxwell AFB and provides guidelines for maintaining those characteristics. It does not take into account future changes or Anti-Terrorism Force Protection (ATFP) requirements. Consequently, if ATFP elements need to be incorporated in a historic district, the landscape changes must be designed in accordance with and approved by the Alabama SHPO, as required by Section 106.

1.3.1 Maxwell site visits

An initial site visit to Maxwell AFB was conducted in February 2012. During this visit, the team conducted a windshield survey documenting the site with photographs. Researchers were also given a guided tour of the base during which photography, sketches, and note taking were used to compile an overall understanding of Maxwell's built environment.

1.3.2 Archival research

The first phase of the team's archival research was designed to establish the historic context of Maxwell AFB. This phase included finding, gathering, and reviewing all primary and secondary sources relevant to the project. Primary sources were indentified and located to document the

original design and planning intentions for Maxwell AFB. Primary sources included the National Archives and Records Administration (NARA) at College Park, MD, the US Geological Survey (USGS) online map collection, and Maxwell AFB. From these sources, researchers collected archival information such as historic photographs, artwork, maps, and architectural plans. These documents were used to provide the historic context and original design intention, as well as to illustrate the challenges of planning and building Maxwell AFB. Secondary sources were used to determine the development sequence of Maxwell AFB. These secondary sources included published and unpublished materials held at archives in NARA, the Air Force Historical Research Agency (AFHRA), and state and Montgomery County libraries.

1.3.2.1 Literature review

Researchers used secondary sources to determine the general history of Maxwell AFB. Secondary sources included published materials found on the region and on Maxwell AFB and its landscapes.

1.3.2.2 Research material

The research team located primary materials including historic maps, plans, and photographs of Maxwell AFB. Additional primary and secondary sources were used to describe how the landscape of Maxwell AFB was used and how the land was constructed to meet those needs. These sources were found in the AFHRA and the National Archives.

1.3.3 Analysis and evaluation

Using the information from the historic context, an overarching NRHP integrity was determined. Cultural resources can retain or lose historic integrity, meaning that a resource either does or does not convey its historic significance. By establishing a historic context, individual resources can be evaluated along similar physical metrics. The physical features of each component landscape were documented and evaluated to establish the character-defining features of the site, and if those features did or did not contribute to the established historic context. From this a recommendation of the resource's eligibility to the National Register was made, if a resource was not already included under the NHL. The landscape's features were evaluated using guidelines in these documents:

- *National Register Bulletin* #15, *How to Apply the National Register Criteria for Evaluation*[1]
- *National Register Bulletin #16A, How to Complete the National Register Registration Form*[2]
- *National Register Bulletin #18: How to Evaluate and Nominate Designed Historic Landscapes*[3]
- *National Register Bulletin #30: Guidelines for Documenting and Evaluating Rural Historic Landscapes*[4]
- *Preservation Brief #36: Protecting Cultural Landscapes*, the *National Register Bulletin: How to Prepare National Historic Landmark Nominations, The Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for the Treatment of Cultural Landscapes*[5]
- The National Park Service's *Guide to Cultural Landscape Reports*[6]
- The Department of Defense guidance, *Guidelines for Documenting and Evaluating Historic Military Landscapes*[7]

The guidelines in these documents were applied to identify and list the character-defining features of the Maxwell AFB landscape while noting the cumulative loss of character, the alternation/masking of prominent features, or the introduction of new elements. Additionally, the landscapes were ranked either high, medium, or low based on their significance to the overall history of Maxwell AFB, the US military, and the United States.

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[1] By the staff of the National Register of Historic Places, ed. Rebecca H. Shrimpton. *How to Apply the National Register Criteria for Evaluation*. (Washington, DC: U.S. Department of the Interior, National Park Service) revised for the internet 2002.

[2] National Park Service. *National Register Bulletin #16A How to Complete the National Register Registration Form*, (Washington, DC: U.S. Department of the Interior, National Park Service) 1997.

[3] J. Timothy Keller and Genevieve Keller. *National Register Bulletin #18: How to Evaluate and Nominate Designed Historic Landscapes,* (Washington, DC: U.S. Department of Interior, National Park Service), undated.

[4] J. Timothy Keller, Genevieve P. Keller, & Robert Z. Melnick. *National Register Bulletin #30: Guidelines for Documenting and Evaluating Rural Historic Landscapes,*(Washington, DC: U.S. Department of the Interior, National Park Service) 1989; Revised 1999.

[5] Charles A. Birnbaum. *Preservation Brief #36: Protecting Cultural Landscapes*, the *National Register Bulletin: How to Prepare National Historic Landmark Nominations, The Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for the Treatment of Cultural Landscapes*, (Washington, DC: U.S. Department of the Interior, National Park Service) 1994.

[6] Robert R. Page, Cathy A. Gilbert, & Susan A. Dolan. *A Guide to Cultural Landscape Reports: Contents, Process, & Techniques*. (Washington, DC: U.S. Department of the Interior, National Park Service) 1998.

[7] Suzanne K. Loechl, Susan I. Enscore, Megan W. Tooker, & Samuel A. Batzli. *Guidelines for Identifying and Evaluating Historic Military Landscapes*. TR-09-6 (Champaign, IL: ERDC-CERL) February 2009.

The landscapes were then ranked on their ability to convey historic significance.

1.3.4 Recommendations

The report concludes with general recommendations to assist managers in preserving and maintaining historic landscapes. This section evaluates the impacts of new construction on historic landscapes including evaluating the impacts of environmental and large-scale landscape interventions. These recommendations ensure that construction and deconstruction impacts to historic landscapes are evaluated and appropriately managed.

1.4 Researchers

This project was conducted by the U.S. Army Corps of Engineers, Engineering Research Development Center, Construction and Engineering Research Laboratory (ERDC-CERL) based in Champaign, IL. The research team included Adam Smith, M.Arch as project manager and lead historian, Megan Weaver Tooker, MLA as lead historic landscape architect, and Ellen Hartman, MLA as assistant landscape architect.

2 Historic Context

This section outlines the historic context of Maxwell AFB's development through identifying important historical themes, people, events, and periods of time influential in the growth of the base. Determining the historic context of the base defines and signifies Maxwell AFB's historic landscapes.

2.1 The pre-military landscape

Prehistory in the southeastern United States is generally designated as the period of Native American occupation before Spanish explorers made contact in the fifteenth and sixteenth centuries. In Alabama, the prehistory period can be divided into five broad but distinct time periods: Paleoindian (10,000–8,000 BC), Archaic (8,000–1,200 BC), Gulf Formational (1,200–300 BC), Woodland (300 BC–AD 900), and Mississippian (AD 900–1540). At Maxwell AFB, several archaeological sites exhibit components from the Woodland Period and the Mississippian Period. These archeological remains suggest that early settlements in the area included large villages located along larger creeks and river flood plains, while smaller sites were located in many other environments. These types of settlements are indicative of hunter and gatherer populations that also supplemented these activities with cultivated crops like corn and squash. The Mississippian period was marked by the growth and permanence of settlements and intensive use of agriculture.[8]

In the early sixteenth century when Spanish explorers made contact with the Native American populations, southern Alabama was dominated by the Muskogean tribes. During this time period, explorer Hernando de Soto's *entrada* (entry) through the Southeast from 1539–1544 was the most prominent Spanish presence in Alabama. In Montgomery, recent research indicates that Spanish settlers often traveled up the Alabama River and encountered native groups. However, the French were the first Europeans to establish long-term settlements in the area in the very early eighteenth century. The first French fort was built on the Gulf Coast in

[8] Brockington and Associates, Inc. *National Register of Historic Places Nominations Maxwell Air Force Base Montgomery County, Alabama*. Atlanta, GA: Brockington and Associates, Inc., 2001, 1-3.

1699 at what is now Biloxi, Mississippi; three years later in 1702, French settlement had reached the Mobile Bay, Alabama, area.[9]

As the European settlements were developing in the Mobile Bay area, French settlers soon began moving inland. Because of this population influx, by 1717 the French had established Fort Toulouse at the point where the Coosa and Tallapoosa Rivers meet to form the Alabama River ten miles northeast of what is now Montgomery. Throughout the next several decades, both French and British traders and military men populated the area. When the French conceded control of the area to the British in 1763 after the Treaty of Paris, the Gulf Coast began to show signs of prospering under British rule. Although agriculture was improving and colonists were moving toward increased self-sufficiency, the American Revolution again gave the Spanish control of the area.[10]

After the American Revolution, the Gulf Coast area's governing party was still in flux. Regardless of uncertainty of the actual owner of the area in the late 1700s, American settlers were flooding into the region. As a result, tensions with the Native Americans flared. The increased contact between white settlers and the predominantly Creek native population reached a critical point by 1813, when a series of attacks and counterattacks escalated into war throughout the Mississippi Territory. A year later in 1814, the Creek War was brought to a violent end with General Andrew Jackson's victory at Horseshoe Bend on the Tallapoosa River. The treaty that was engineered to end the war was signed at Fort Toulouse, which was subsequently named Fort Jackson in 1815. By then, Andrew Jackson was acting as a commissioner for the United States, and he forced the cession of 23 million acres of Creek land, 14 million acres of which were in what is now Alabama.[11]

During the 1810s, the population of Alabama grew more than 1,000 percent as "Alabama fever" permeated the nation at the end of the war. Subsequently, Mississippi became a state in 1817 and, at the same time, Alabama gained separate territorial status. Alabama's population continued to increase, and by 1819 the territory became a state. The area around what is now Montgomery was attractive for settlement because of

[9] Ibid., 4.

[10] Brockington and Associates, Inc. *National Register of Historic Places Nominations Maxwell Air Force Base Montgomery County, Alabama*. Atlanta, GA: Brockington and Associates, Inc., 2001, 4.

[11] Ibid., 5.

the nearby river, prime agricultural lands, and the proximity to existing transportation routes. Montgomery was established in 1817 on a bluff along a prominent bend in the Alabama River. The town and county of Montgomery grew quickly during the early antebellum years when fueled by the politics, economics, and transportation of the early and middle nineteenth century. The capital of Alabama was moved to Montgomery in 1846 because of this early growth, bringing with it added prestige and money to the region.[12]

The Alabama River provided access to Mobile for the area's cotton plantations, and the young city of Montgomery served as a commercial and transportation center for Alabama's Black Belt region.[13] During the Civil War, the city served as an "important depot and distributing point for troops and supplies of ammunition and provisions" and served as the capital of the Confederate States from January–April 1861.[14] The land that would eventually be purchased for Maxwell AFB was originally ceded from the Creek Nation to the U.S. government in 1810. Several owners bought and sold land in the general area during the 1810s, 1820s, and 1830s before more permanent settlement and development began. The first documented owner of the original component of Maxwell Field was Thomas Gilmer who bought land in the area in the mid-1800s. For the next two decades, the area stayed in the Gilmer family through complicated transactions and deeds until 1874, when Gilmer sold the then-named Troy Plantation to Marcus Munter and Henry E. Faber. The plantation grew a monoculture crop of cotton and benefited from its connection to the Alabama River to send its cotton to market.[15]

Although plantation agriculture was the main land use in the area, a village called Douglassville was represented on an 1896 plat. Douglassville was nearly rectangular in shape, divided into square blocks, and lay on either side of Washington Ferry Road, now called East Maxwell Boulevard. Most of the blocks in Douglasville were divided into four equal sections,

[12] Brockington and Associates, 6.

[13] The term originally referred to the region's rich, black topsoil, but it later reflected the concentration of African-American population.

[14] Brockington and Associates, 7.

[15] Ibid., 9-10.

but a 1907 plat showed that the blocks were further divided into as many as twenty lots.[16]

By the late 1880s, Montgomery saw a rapid increase in manufacturing that continued into the early twentieth century. The importance of manufacturing to the region would later drive community leaders to promote their city as an aviation center. However, Montgomery's early aviation industry was initiated when Wilbur Wright came to the area in the spring 1910, looking for a southern home for air training experiments. Impressed with the city's weather and business leaders, Wilbur Wright selected a site west of the city along Washington Ferry Road and close to the village of Douglassville.[17] By March 1910, the Wright brothers along with five students, a mechanic, and the airplane had arrived in Montgomery to set up operations. After the initial deal had been agreed upon, workers had made several improvements to the site within three weeks. Three square miles of field had been cleared and leveled for the takeoff and landing areas, a hangar had been erected, lights installed, and the road had been improved. Over the next two months, the Wrights made many flights until they returned to Ohio in early May 1910.[18]

2.2 Initial construction at Maxwell Field

The development of the Wright brothers' air training center in 1910 established Montgomery as a regional aviation center. The land that Wilbur Wright chose for his aviation experiments had been predominantly farmland, the majority of which was part of the Troy Plantation. The influence of the Wright brothers, combined with the area's long-standing military connections during World War I (WWI), resulted in the establishment of an aviation repair facility on the site of the Wright brothers' test field. WWI had provided the military incentive to develop military air strategy; thus, the Army had been looking for aviation facilities shortly after entering WWI in 1917. However, Taylor Field, on the east side of Montgomery, was the first site in the area for a military airfield. It covered 800 acres and included engine repair facilities as well as airfields and storage facilities.[19]

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[16] Ibid., 11.

[17] Ann Payson. *Some Notes on Maxwell Field, Its Origin and Growth from 1910 to 1938*. Misc-2 39-73. Undated, 1.

[18] Brockington and Associates, 8.

[19] Ibid., 13.

Recognizing the economic impact of having military facilities in their city, Montgomery leaders directed the Army's attention toward the fields which the Wright brothers had developed for their flying school. The Army agreed, and negotiations to lease 302 acres were quickly concluded in April 1918. This newly leased area was used as a repair and service station for aviation engines, and the flying field was used to test the repaired aircraft. During this time, a rapid building program erected 52 temporary buildings to house the service personnel and provided three miles of paved roads by July 1918. The buildings were arranged in the open field and were connected by wooden sidewalks. The buildings were modeled on the contemporary Craftsman style of architecture and featured low, rectangular buildings with broad hipped roofs, overhanging eaves, and exposed rafter tails. This new complex was named the Aviation Repair Depot No. 3 – Montgomery, and it initially received four service squadrons in charge of engines and repairs. Additional staffing included a Quartermaster Squadron and a Medical Squadron, the latter with its own hospital on the grounds.[20]

After WWI, the Army was convinced of the importance of air power in warfare and by 1920, the Army had agreed to keep Aviation Repair Depot No. 3 as a post. Throughout WWI, the government had leased the area for the repair facility until in 1920, they purchased the tract. In January 1921, the name of the facility was changed to the Montgomery Air Intermediate Depot. In the following decades, the government expanded the depot by purchasing adjacent tracts, adding more housing, and improving the aviation support facilities.[21] These initiatives, combined with a second renaming of the site to Maxwell Field, provided permanence to the facility post WWI at a time when the Army was reducing its overall scope and size (Figure 2).

[20] Ibid., 13.

[21] Brockington and Associates, Inc. *National Register of Historic Places Nominations Maxwell Air Force Base Montgomery County, Alabama*. Atlanta, GA: Brockington and Associates, Inc., 2001, 13-14.

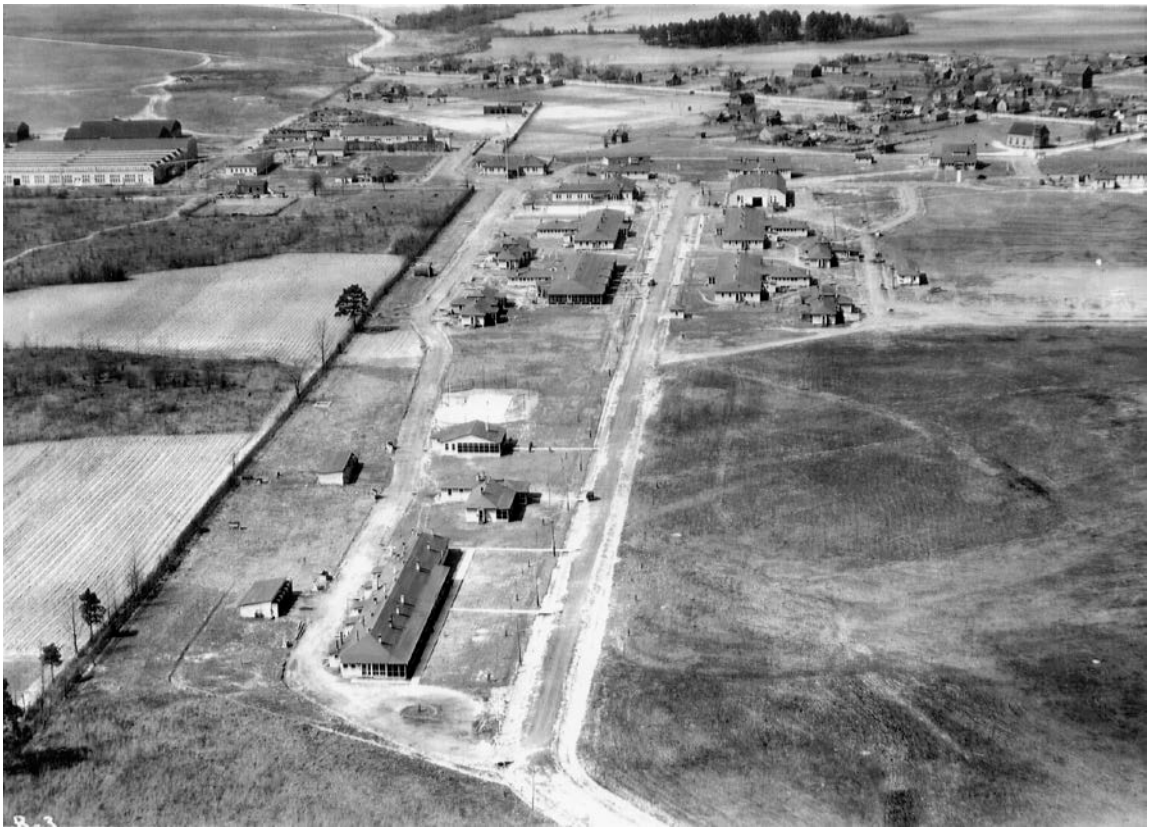

Figure 2. Maxwell Field before the 1933 redesign, undated (NARA 342-FH Box 1069 B19789).

The years between WWI and World War II (WWII) constituted the period when much of Maxwell's growth and development occurred. In 1926, passage of the Army Housing Program and the Air Corps Act provided a five-year building program that made money available to Maxwell and 31 other airfields to replace the temporary structures hastily built for WWI. Major General Frank Cheatham, Quartermaster General, created a staff and advisory board of nationally prominent architects and city planners to develop comprehensive plans for the bases covered under these acts. The architects and planners were products of the Progressive era who were influenced by the City Beautiful movement and sought to design complete environments on the bases for living. George B. Ford, one of the nation's leading city planners, took over the design of many of the Army's new or renewed bases. Ford's work emphasized zones of similar land uses and, in effect, created modern subdivisions on military installations. Through Ford's influence as well as input from the other architects and planners on

the advisory board, the character of Maxwell Field's built environment was established during the inter war period.[22]

The Army Air Corps erected several bases throughout the nation during the late 1920s and early 1930s. These bases shared commonalities derived from the influential planning and design mentality of the times. The ground plan for each base was laid out in the middle-to-late 1920s, and each exhibited a clear design that was based on the requirements of the selected sites. For example, residential buildings and the structures along the flight lines were laid out according to efficiency, maximizing the use of prevailing winds and the local topographic conditions. The ground plan for Maxwell Field exhibited the most multifaceted plan of all the 1920s-era Air Corps bases. At Maxwell, the flight line structures were set in an "L"-shape, and two clearly designed clusters of residences were located to the east and north. The Noncommissioned Officers' (NCO) quarters were closest to the flight line and were grouped in three geometric sets: concentric arches, an oval, and a polygon. The Senior Officers' Quarters (SOQ) were located farther away from the flight line to the north and east. These quarters were planned along three teardrop-shaped streets with large, central open areas behind the housing. The architecture of the early housing unified the area through the use of stucco walls, red tile roofs, and Mediterranean architectural styles. Although many of the Air Corps bases built during this period were designed with strong organizational geometries, the plan used for Maxwell is unique in its composition and response to the existing environment.[23]

The first major building project at Maxwell Field was building new barracks for enlisted Air Corps men. The contract was let in October 1927, and the barracks (Building 836, Simler Hall) was the first permanent structure at Maxwell Field. At the same time, the Army authorized construction of thirteen bungalow homes for NCOs. These homes were located in the crescent-shaped arches of land which had been approved as a housing area by George Ford in early 1927. The bungalows were built in a Spanish Mission style that was used at other airfields around this time. This initial building phase was followed quickly by another round of construction when the Army announced the plan to move the Air Corps Tactical School (ACTS) from Langley Field, Virginia, to Maxwell Field. The

[22] Brockington and Associates, 14-15.

[23] Ibid., 15.

result was that Maxwell Field continued developing throughout the Great Depression of the 1930s by purchasing land to accommodate the ACTS as well as acquiring 75 acres that were donated to the Army by the city and county of Montgomery.

Because of the large number of officers coming to Maxwell to teach at ACTS, a new area for SOQ needed to be developed in the early 1930s. The area selected for this new housing development was northeast of ACTS and near the river. The plan for the housing area was approved by George Ford, and it reflected contemporary community design ideas. The result was a suburban development with residences arrayed along curving streets, with front lawns and large collective open spaces behind the housing groups. The quarters that comprise the SOQ housing were designed by architects in the Quartermasters' Corps in the early 1930s; those designs used nine variations of the French Provincial style of architecture. In 1934, the park-like atmosphere of the SOQ was reinforced when the base golf course was constructed under a New Deal landscaping project (Figure 3).[24]

Figure 3. Aerial view of the SOQ area (foreground) in June 1933 (NARA 342-FH Box 1069 B19785).

In the early 1930s, the War Department and the Bureau of Prisons agreed to house a federal prison on the grounds of Maxwell Field. After the

[24] Brockington and Associates, 16.

decision was made, the prison was relocated several times before it was finally located on River Road near the Alabama River, making the location north of the runways.

2.3 Maxwell AFB during World War II

During the interwar years, the ACTS School operated at Maxwell and provided training in military aviation strategy to a generation of pilots and commanders who would go on to implement their education in WWII. The demands of these training programs resulted in significant construction programs at Maxwell. At the beginning of the 1940s, Maxwell's spatial organization grouped similar programs together into individual areas. The most aesthetically distinct area of the installation was the SOQ with its curving streets, distinct architecture, and large open spaces. However, grouping the NCO quarters, the school, and the administration buildings—all designed by the Quartermaster Corps in the Spanish Eclectic style—around a large field also created a visually cohesive area on the installation.

These changes during and immediately prior to WWII dramatically changed Maxwell Field. While the educational mission of the base remained, the changing scope of the war dictated that vast numbers of barracks needed to be built. Changes occurring during this time meant that operations at ACTS were temporarily abandoned and the staff was reduced to a minimum. Less than a year later, however, the Army Air Corps resumed training and located the Southeast Air Corps Training Center (SEACTC) at Maxwell Field. As a result, Maxwell served as a primary training facility in the southeast for bombardier, navigation, and pilot operations. With the influx of personnel, housing became a growing problem and by November 1940 the Army had used federal funds to quickly construct barracks for enlisted men in training. These WWII barracks were arrayed in grids over the majority of open space in the historic core of the airfield. The barracks fill the open spaces including the recreational field west of Austin Hall (Building 800), the areas east of the NCO Quarters, and the newly acquired land to the south and east of the main core (Figure 4).

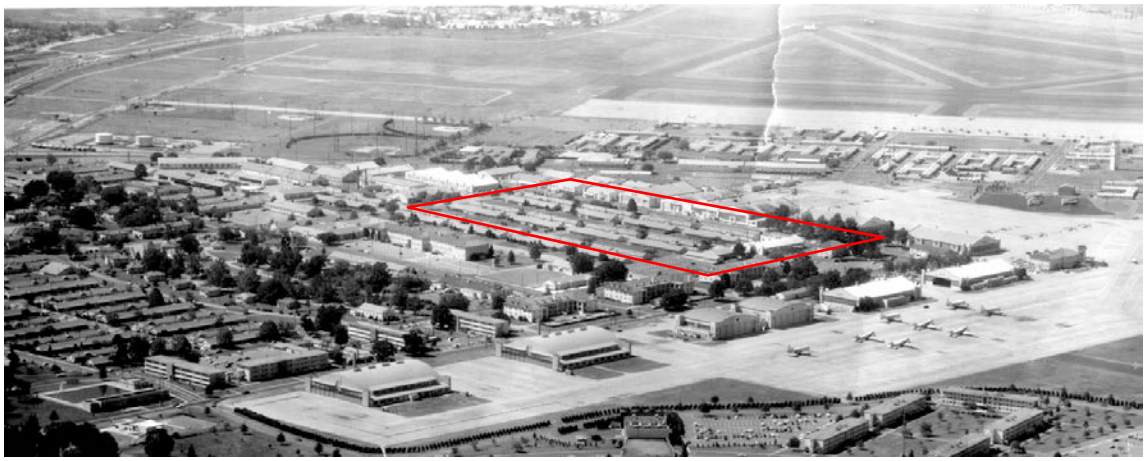

Figure 4. To accommodate the influx of soldiers leading up to and during WWII, barracks were built in nearly all of Maxwell's open space. In the middle ground, rows of WWII temporary barracks (Shown highlighted with a red line) fill the former athletic field west of Austin Hall (Building 800), 1967 (Maxwell AFB Cultural Resources).

The expansions to Maxwell lands began in April 1941, when sixty acres were added along the north side of Bell Street but excluding the Buckeye Cotton Oil Company land and an area that was occupied by houses and stores. A year later in 1942, the Army began a new round of condemnation proceedings on approximately 1,000 neighboring acres. Barracks eventually filled in open areas in the southeastern portion of the site.[25] This WWII construction phase also dictated the relocation of Selfridge Street—the original highway to Birmingham—and the railroad tracks that ran parallel to the road as well as one of the entrances to Maxwell Field that was at the intersection of Selfridge and Arnold Streets.

Existing runways and support facilities at Maxwell were also under the strain of the new training mission. To alleviate the problem, the Army negotiated in June 1941 with the City of Montgomery to lease the city's municipal airport for $1 a year. The municipal airport had been built in 1929 on more than 600 acres five miles north of the city (Figure 5). Later this airport would be renamed Gunter Field and become Maxwell Field's annex as an Air Corps Basic Flying School.

[25] Brockington and Associates, Inc. 17.

Figure 5. Montgomery Municipal Airport that later became Gunter Field, 1936 (NARA 342-FH Box1065 B18778).

Also due to the buildup for WWII, Maxwell AFB activated the Fourth Aviation Squadron comprised of African-American troops. In 1941 the mission of the Fourth was to provide security along with other services such as janitors, chauffeurs, truck drivers, foot messengers, drummers, buglers, military police, and hospital and mess attendants. The Fourth Aviation Squadron lived in tent cities for two years until Buildings 1208, 1209, 1210, 1211, 1214, and 1215 were constructed near the present-day federal prison facility northwest of the base's main core. These barracks were intentionally separated from the rest of the base. Although the enlistment of black airmen signified an evolving attitude of the Army toward African-American personnel, full recognition of their contributions had yet to be accepted. In fact, during the 1920s and 1930s the Air Corps and the Marines had been closed to black airmen and soldiers, but the necessity of personnel for WWII forced Army commanders to recruit without racial discrimination. However, the result was that in southern bases, there was a strict segregation of black troops.[26]

[26] Brockington and Associates, Inc, 18-19.

During the WWII years, the training mission varied at Maxwell and Gunter Fields in order to provide primary, advanced, and instructor flying training. Maxwell also provided training to Royal Air Force (RAF) pilots in an agreement with the British government. Late in WWII, Maxwell received the new B-29 "Superfortress" bombers, which would again change the field's spatial requirements. As a result of the plane's large size, new hangars had to be built and runways expanded. In October 1945, the Army announced plans to develop the US Air Corps Tactical School at Maxwell which would include three sections: the Air War Course, the Command and Staff Course, and the Fighter and Bomber Tactical Course.[27]

2.4 Maxwell Air Force Base after World War II

Maxwell Field continued as an education center for the Army Air Forces after WWII ended. However, in 1946 the overall mission at Maxwell Field changed to emphasize aviation education when ACTS was moved to Maxwell from Langley Field, Virginia. Like the other schools at Maxwell, the ACTS grew quickly but rather than building more space, the Army chose to update existing facilities. For example, the WWII Cadet Mess (Building 500) was converted in March 1947 to a classroom, conference, and assembly building. Later in 1947, ACTS officials announced plans to convert barracks to quarters for married NCOs.

The National Security Act of 1947 separated military air operations into a distinct branch of the nation's armed forces. The resulting U.S. Air Force (USAF) was now charged with the duties previously associated with the Army Air Forces. During this transition, the Air University (AU) was in its second year of operation and was greatly influencing the spatial development of Maxwell Field. Then, in 1948, Maxwell Field was redesignated as Maxwell AFB. The AU continued to grow rapidly and throughout the late 1940s its growth increased the demand for additional facilities, housing in particular. In 1949, the Weaver Theater was also built; it was named for Walter Weaver, who served as Maxwell Field's commanding officer from 1927–1931 and from 1939–1942. In 1950, with funds from the Wherry Act of 1949, a new housing area east of the field called Maxwell Heights received a new 250-unit housing addition.[28]

[27] Ibid., 19.

[28] Brockington and Associates, Inc., E-20.

During the Korean War, the AU continued to serve as the educational component for Air Force officers, but other mission requirements became priorities. Because of the large numbers of wounded coming from Korea, the USAF decided to expand Maxwell's hospital for their care while the School of Aviation Medicine discussed renovating buildings and constructing others at Gunter Annex. After two other pilot training programs were moved to Maxwell, planning began for a new academic center. The academic buildings of this new complex would be arrayed in a circle, ringed by a main road, and called Academic Circle. Within five years, the Air Force had constructed four classroom buildings, an administrative building, and five dormitories. A year later, a library and student officers' mess were completed. The academic buildings were arranged within the circle, but the dormitories radiated off the circle to the northwest. To the south was a rectangular open area lined with trees (Figure 6).[29]

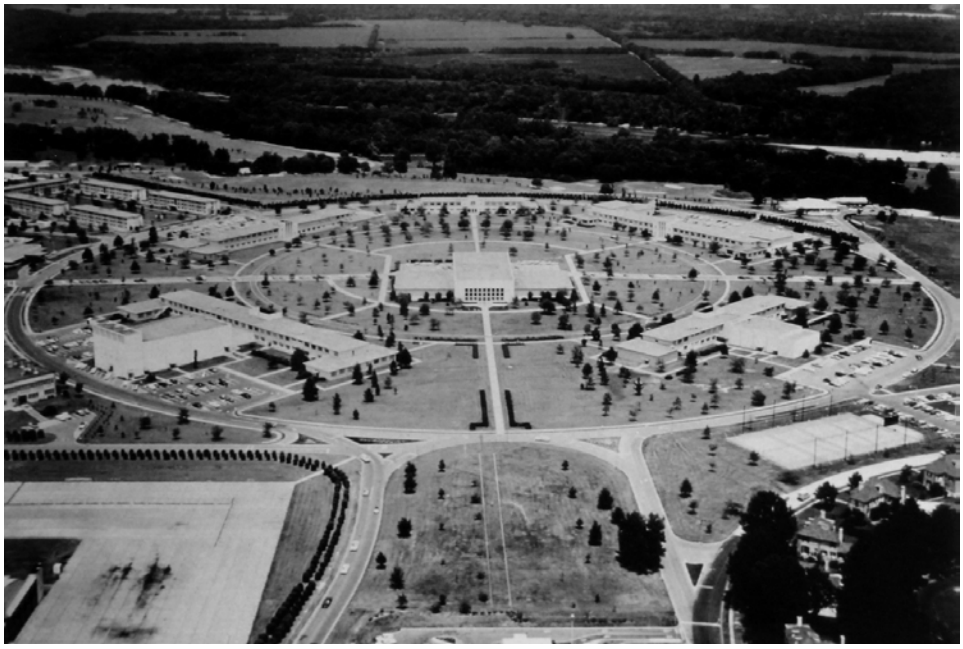

Figure 6. Chennault Circle in the late 1950s (Maxwell AFB Cultural Resources).

In 1975, Academic Circle was renamed Chennault Circle after Lieutenant General Claire Chennault, who was Chief of Pursuit Section at ACTS during the 1930s. Figure 7 locates Chennault Circle within the Maxwell AFB boundaries, showing how the area was spatially integrated with the 1930s and 1940s base development.

[29] Ibid., E-20.

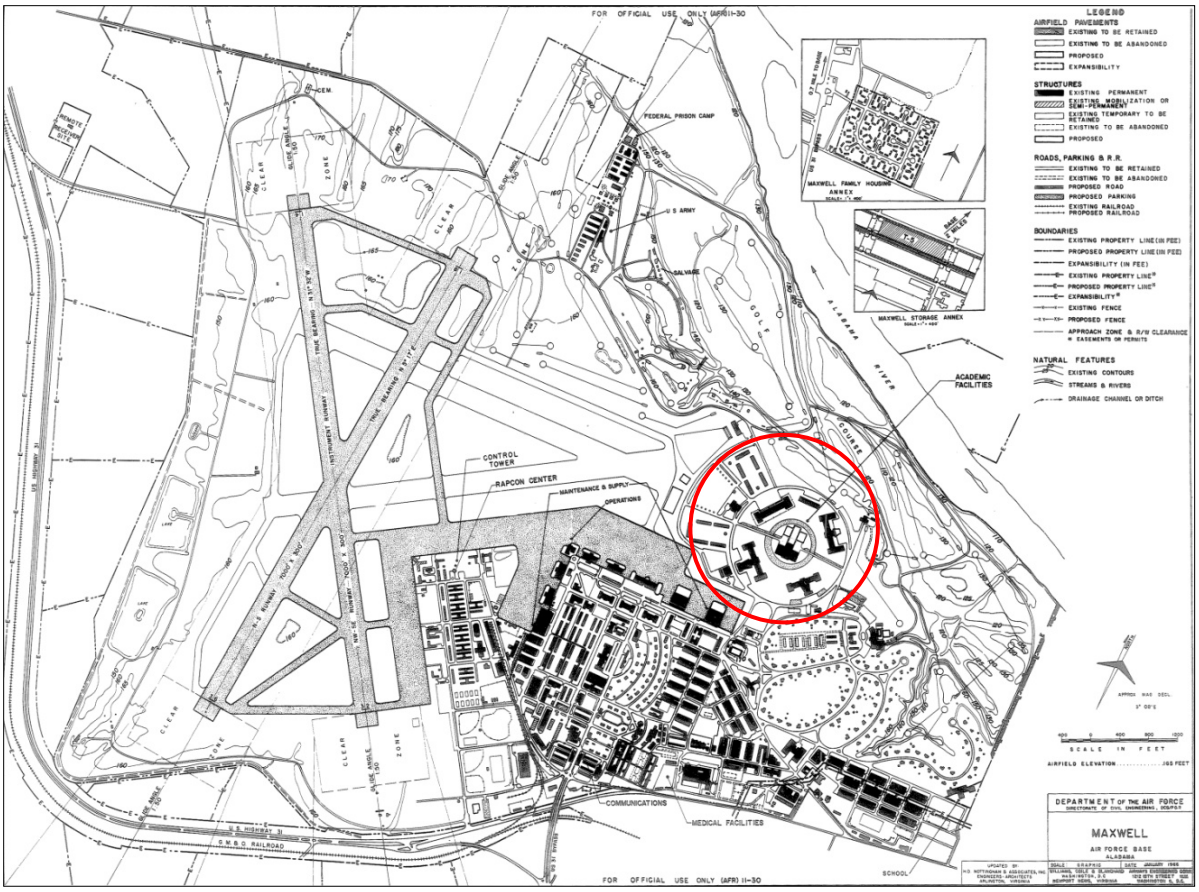

Figure 7. The 1966 base master plan showing Chennault Circle with the WWII temporary building infill, the development in one of the SOQ open spaces, and the Maxwell Family Housing Annex (Maxwell AFB Cultural Resources).

Throughout the 1970s and 1980s, the growth of Maxwell AFB primarily centered on adapting existing buildings to accommodate different uses and further expanding the AU complex around Chennault Circle. In the historic core of Maxwell, Austin Hall (Building 800) was converted as the headquarters for the AU. In the 1980s, most of the WWII temporary buildings built to the west of Austin Hall were demolished, except for a row lining the northern edge. In the late 1980s, the 42nd Air Base Wing Headquarters (Building 804) was built on the former athletic field west of Austin Hall. Several parking lots were included with the construction of Building 804. These lots were located on the north and south sides of the building, and an additional single row of parking was located along the building's western edge (Figure 8).

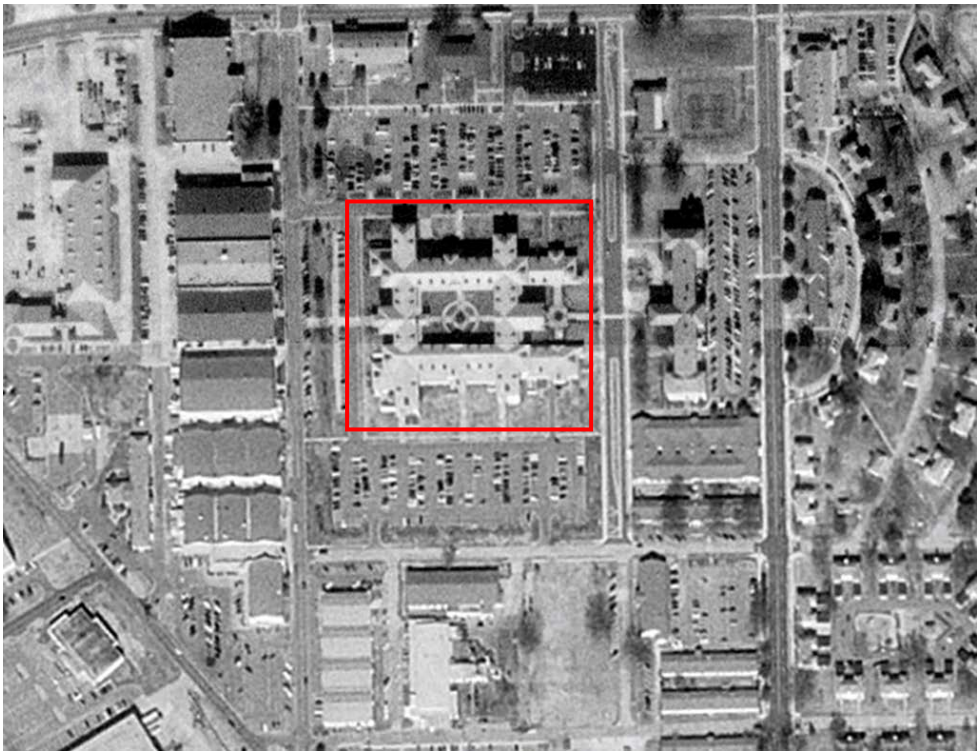

Figure 8. New 42nd Air Base Wing Headquarters (outlined in red here) was built in the athletic field west of Austin Hall, 1998 (Google Earth).

In the early 2000s, much of the remaining WWII barracks were demolished including those in areas to the southwest of Building 1 and between Magnolia Boulevard and Spruce Street. The 1950s barracks (Buildings 1412, 1413, 1414, 1415, and 1416) that radiated off Chennault Circle to the southwest were also demolished in the early 2000s and replaced with modernized dormitories. West of Chennault Circle along Lemay Plaza, the Officer Training School complex was developed that included dormitories, a parade field, and classroom buildings. Near this complex, recreational fields and courts were constructed on the closed portion of Taxiway 2.

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3 Historic Landscape Inventory

The National Park Service (NPS) defines historic character-defining features of a landscape as "prominent or distinctive aspects, qualities, or characteristics of a cultural landscape that contribute significantly to its physical character."[30] Through the study of landscapes, the built environment is explained by the physical remains of the natural and cultural shaping forces. The historic landscapes of Maxwell AFB are significant because they describe the adaption of the built environment to the cultural values and educational and military mission of the Base. Understanding the factors that influenced and composed the landscape of Maxwell informs the preservation of its historic qualities. This chapter identifies the historically significant features and characteristics of the Maxwell landscape which are used to evaluate the built environment and establish the historic eligibility of the site.

To identify the prominent or distinctive characteristics that make a landscape historic, the physical features of the site are divided into eight areas: site and layout, land use, expressions of military cultural values, transportation networks, views and viewsheds, buildings and structures, vegetation, and small-scale features. These eight characteristics of the landscape combine to form the built environment that is the primary image of Maxwell AFB.

3.1 Designed historic landscapes

A landscape is considered designed if it meets the following criteria outlined in National Register Bulletin #18:[31]

- It has significance as a design for work of art.

[30] Birnbaum, Charles A. *National Park Service Preservation Brief #36: Protecting Cultural Landscapes Planning, Treatment and Management of Historic Landscapes*. (Washington, DC: National Park Service 1994), 4.

[31] National Park Service, *National Register Bulletin #18: How to Evaluate and Nominate Designed Historic Landscapes*, (Washington, DC: US Department of the Interior), undated.

- It was consciously designed and planned by a landscape architect, master gardener, architect, horticulturalist, or other design professional in accordance with design principles.

- It was planned by an amateur using a recognized style or tradition.

- It has a historical association with a significant person, trend, event, etc. in landscape architecture or landscape gardening.

3.2 Site and layout

In historic landscape studies, the term "landscape characteristic" has a specific meaning. Landscape characteristics are defined as the "tangible evidence of the activities and habits of the people, who occupied, developed, used, and shaped the land to serve human needs; they may reflect the beliefs, attitudes, traditions and values of these people."[32] Identifying the characteristics of the military landscape requires an understanding of the natural and cultural forces that have shaped it. This section will describe these processes and the resulting landscape features that together comprise the military landscape. The purpose of this section is to help define the overall character of the landscape and indentify the many features which make it significant.

Sites for military installations are selected because a location meets the physical requirements of the mission. The landscape is then spatially organized to accommodate the land use needs of the inhabiting military forces. The design of a military installation's built environment incorporates relationships between environmental features with the necessities of the specific military mission.[33] The layout of any military installation is based on the relationships among the pre-existing landscape's predominant landforms, topography, climate, water bodies, and vegetation and the military's lands use requirements.[34] The mission and needs of the military actions dictates the spatial organization of an installation and the way the military uses the land.

The site and layout of Maxwell AFB was strongly influenced by the environmental requirements needed for flight training. The site was

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[32] National Park Service , *National Register Bulletin #30: Guidelines for Evaluating and Documenting Rural Historic Landscapes* (Washington, DC: US Department of the Interior 1992), 3.

[33] Suzanne Keith Loechl, Samuel A. Batzli, and Susan I. Enscore 1996, 67.

[34] Loechl, et al 1996, 67.

originally selected as a flying field by the Wright brothers because of its level topography. The Army appropriated the site in the 1920s because of its favorable climate, level topography, and close proximity to Montgomery, Alabama. Early layout of the base was L-shaped with an east-west axis of development on the northern edge and a north-south axis of development on the eastern edge. Aviation facilities were located along the northern boundary with the barracks, mess halls, officers' quarters, and other support facilities to the south. At that time, the field had two entrances, one on the north side off Washington Ferry Road and one to the south off Selma Road. A 1921 plot plan of Maxwell Field shows an arched row of proposed quarters to the east and an emergency landing field between the proposed housing and the existing barracks. The large triangular piece of land around which the two axis of development were located was privately owned property that in 1921 was being negotiated for purchase. This critical triangle of land was eventually purchased in October 1929, which allowed the field to accept the proposed layout approved by George B. Ford (Figure 9).

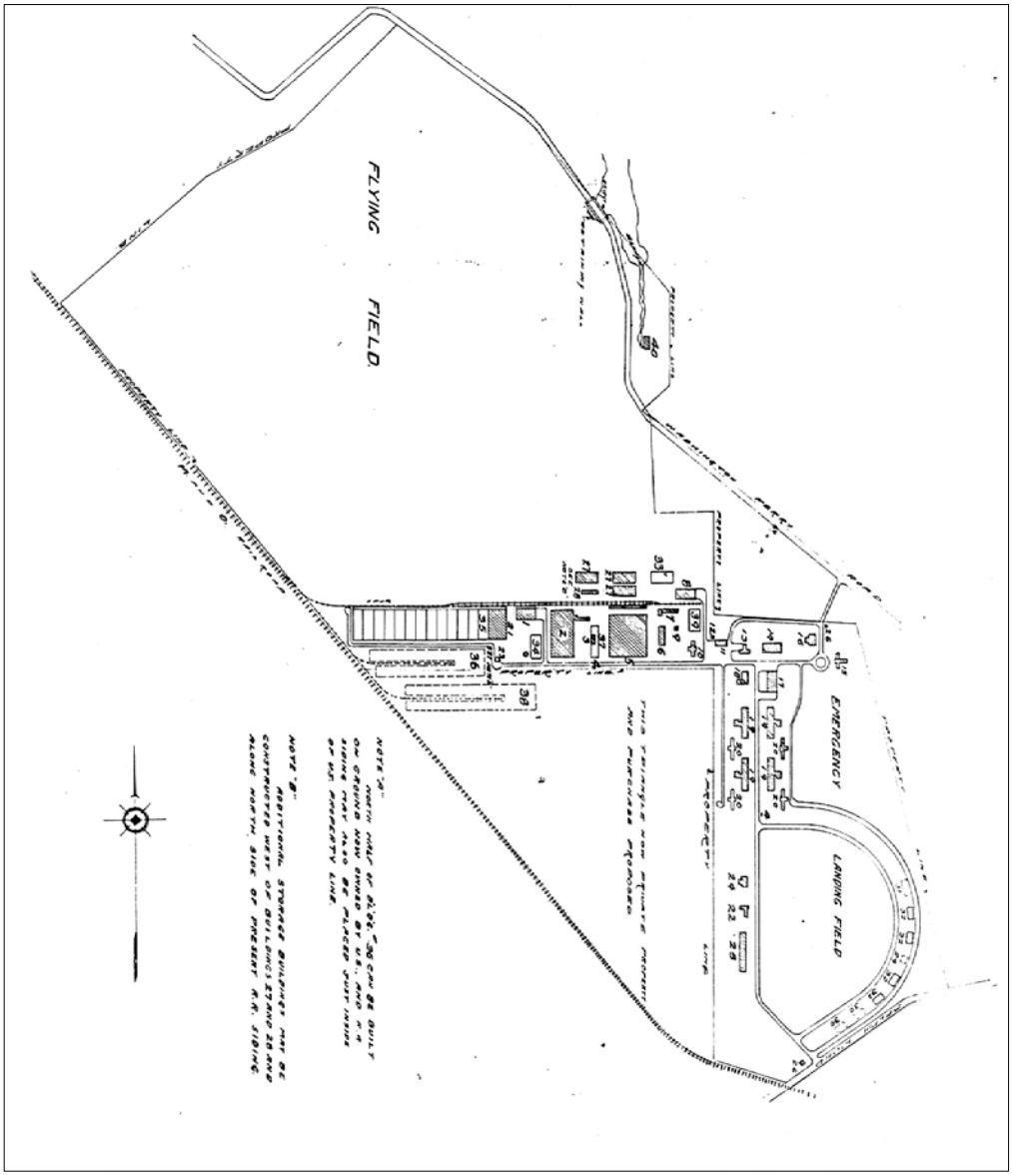


Figure 9. Maxwell Field in 1921. The drawing has been oriented so that north is toward the top of the page. (National Archives and Records Service [NARS] Cartographic and Architectural Branch, RG 92, Railroad Blueprint File, Folder #16-1).

By 1927, layout of Maxwell Field showed changes. Although this plan of proposed construction was later modified by George B. Ford, Maxwell Field was still organized around east-west and north-south axes, with a housing area planned to the east of the original building groups. On the 1927 plan, this housing area was to accommodate officers' quarters and NCO quarters. The housing area's layout was symmetrical and included houses arrayed on arching streets. Two roundabouts were arranged along the northern and southern bounding streets; the hospital and a proposed chapel were located around the northern roundabout. To the west of the

hospital, along the northern axial street, was the administration building, the Post Exchange, and a barracks. The streets in this plan were illustrated with regularly spaced street trees while the boundaries of the property were shown with screening vegetation. Maxwell Field's overall layout was still arranged around the large triangular space that had previously been private property (Figure 10).

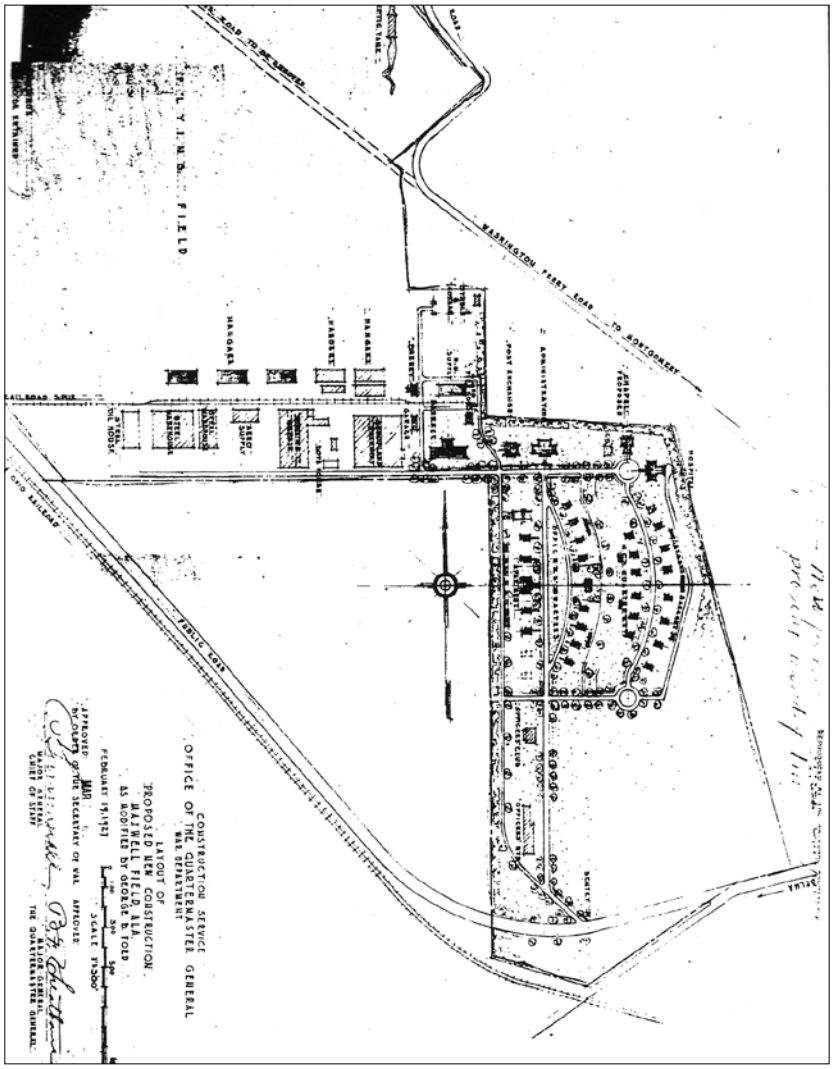


Figure 10. Proposed layout of new construction at Maxwell Field in 1927, again oriented here so that north is to the top of the figure. The early 1930s construction efforts used this organizational plan (NARA, RG 18, Project Files: Airfields, Maxwell Field, File #600.1-600.12, Box #2159).

Two years later, a 1929 proposed layout for Maxwell Field shows further thought to base planning with a reorganization of the aviation support area that aligns the hangars along the western edge of the site, unlike the northern line of aviation support facilities previously shown in the original

plan. The 1927 proposal also suggests that the triangular piece of privately owned land had been purchased by the Army and was now being included in base planning. Another significant change to the base layout was the incorporation of a diagonal street running from the northwest to the southeast. In the 1929 plan, the officers' and NCO quarters are arranged like they were in the 1921 plan, but the area to the south has also been planned with more officers' quarters. East of the newly aligned hangars was located a large athletic field with a gym, theater, and other support buildings surrounding it. This plan incorporated several more roundabouts at major street intersections and uses a tree-lined boulevard to separate the two major housing areas (Figure 11).

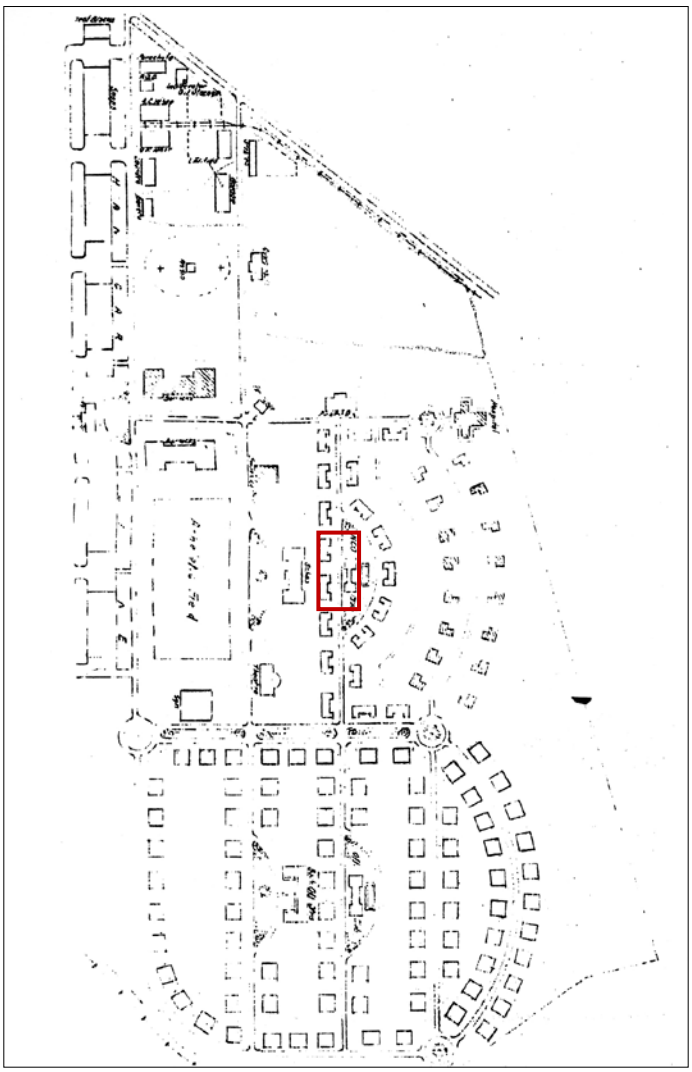


Figure 11. 1929 proposal for Maxwell Field with Building 800 highlighted for reference (NARS Downtown Branch, RG 18, Project Files: Airfields, Maxwell Field, File #600.1-600.12, Box #2159).

A letter from George B. Ford, dated 31 December 1929, reinforces the transformation that was occurring at Maxwell Field.[35] The letter encourages the use of large open spaces and clustering buildings of similar uses because of the hot climate of Alabama. The letter goes on to state that he has grouped the most-used buildings near the administration building where they can easily be reached. Additionally, Ford grouped the gym, swimming pool, and the enlisted men's athletic field together, west of the administration building.[36]

A plan of Maxwell Field from 1933 shows a partial execution of the proposed plan of 1929. In the 1933 plan, a large, central open space is surrounded on the west by hangars, the Quartermaster area, and stables; on the south by an open area; on the east by the main building of the Tactical School; and on the north by barracks. To the east of the main building of the Tactical School were arranged NCO quarters on arching streets, south of which was another grouping of NCO duplex quarters arranged around a small open space. The housing was constructed with Depression-era funds and generally complements the functional groupings and architectural character of the earlier buildings. As a housing group, this collection of buildings constitutes a self-contained urban unit that reflected the ideals of contemporary planned civilian communities. The hospital was located to the east of this housing area at the meeting point of the streets around the housing.[37]

For the aviation-related part of the plan, four hangars were arranged around the northwestern corner of the site, with two hangars placed to the north and two hangars placed on the west side. Between the two sets of hangars was located the flight control tower and operations building. The hangar arrangement corresponded to the L-shaped alignment of the two runways, with one oriented north-south and the other oriented east-west; these orientations maximized the proximity of aviation facilities to the Tactical School (Figure 12).

[35] EDAW, Inc. *Cultural Resources Plan Air University Montgomery, Alabama* (Atlanta, GA: EDAW, Inc., 1992), Figure 6.5.

[36] EDAW, Inc. *Cultural Resources Plan Air University Montgomery, Alabama* (Atlanta, GA: EDAW, Inc., 1992), 6-5.

[37] Ibid., 6-4.

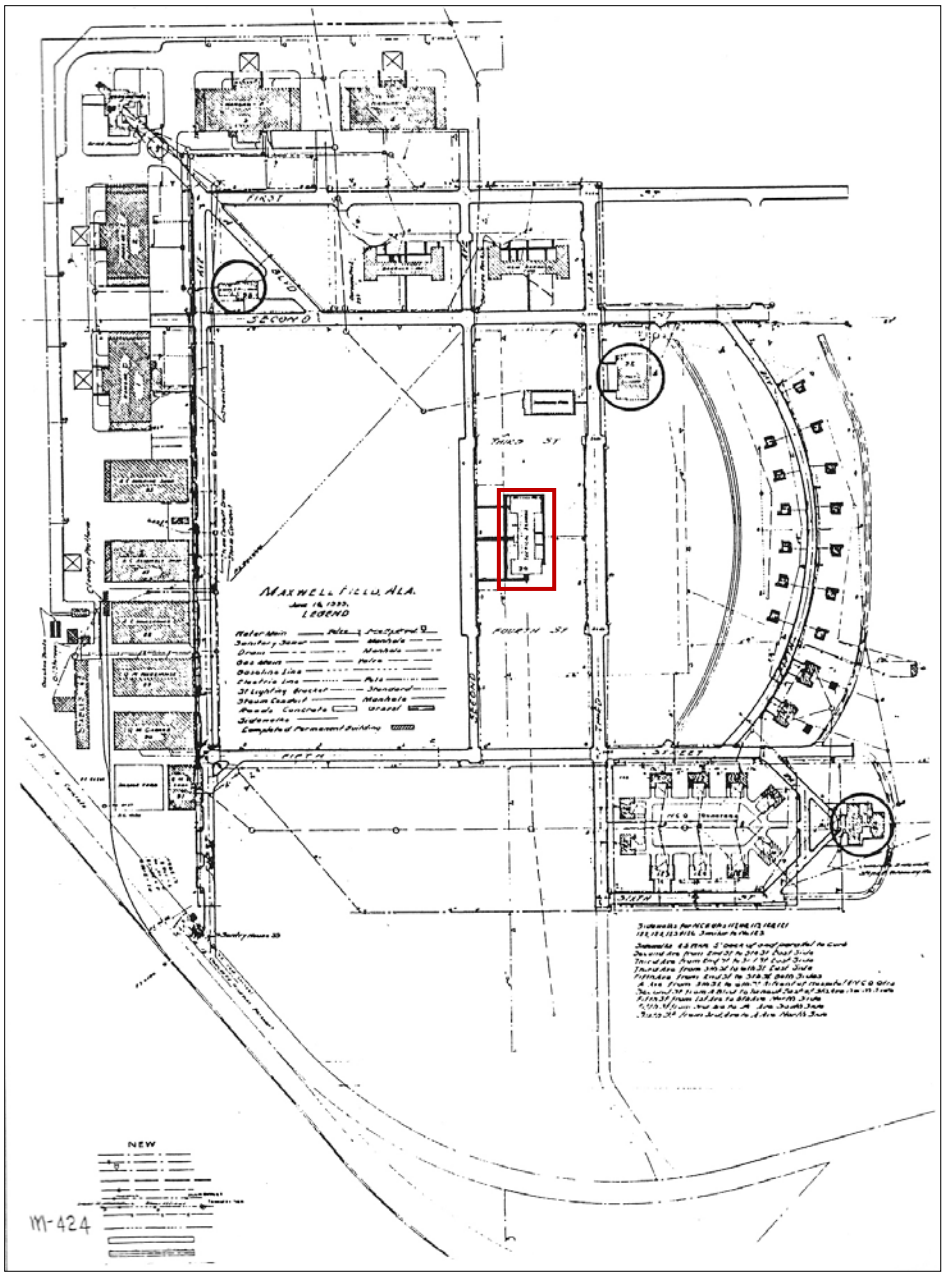


Figure 12. The 1933 as-built plan of Maxwell Field. Building 800 is highlighted in red as a point of reference (NARS Suitland Branch, RG 77, Construction Completion Reports 1917-1943, Maxwell Field, Box #200).

Concurrent with the finalization of the operational core base plan in 1933 was the planning and layout of the SOQ neighborhood. A separate neighborhood was needed because of the large numbers of officers coming to the Tactical School. As a result, a total of ninety-nine SOQ buildings, community buildings, and golf facilities were constructed between 1932 and 1934 with funds from the 1932 Emergency Relief and Construction

Act. In 1937, the commanding general's "summer" house was built in this same area with funds from the Works Progress Administration.[38]

No historic plans for the SOQ area and golf course have been found; as a result, much of the following information about the planning and construction of the area has been derived from correspondence and other secondary sources. Although there are no historic plans, the park-like suburban atmosphere that was built reflected contemporary community planning ideals of the 1930s. In a letter from a War Department official to the commanding officer at Maxwell Field, the new housing area conditions were described as "the officers' building area is to be placed on new ground outside of the present post, and so arranged as to make use of natural terrains, including existing woods."[39] Although money for the project was secured as early as 1931, construction was delayed until 1932 over issues in securing a large enough tract of land. Sometime between 1929 and 1933, the wide street now called Maxwell Boulevard was extended to provide a link between the officers' suburb and the core of the installation. The street extension required that the hospital be relocated from its former site at the end of Maxwell Boulevard to its permanent location south of the NCO bungalows.

Construction of the golf course was most likely undertaken by the WPA as one of the many "landscaping" projects at Maxwell Field during the mid-1930s, since expenditures for such a luxury would have been handled discreetly during the Depression.[40]

WWII manpower needs again brought significant building campaigns to the field. With dramatic influxes of airmen, Maxwell Field was expanded to the south and east, and most of the open spaces in the 1930s development were filled with temporary barracks. The expansions to the south and east of the general post were used for temporary construction and, as a result, these two areas were developed without any master planning. The WWII buildings were arrayed in grids and oriented to most efficiently fill the open, buildable space to the south and east of the existing post. Although considered temporary construction, the WWII buildings were retained throughout most of the twentieth century. Directly

[38] EDAW, Inc. *Cultural Resources Plan Air University Montgomery, Alabama* (Atlanta, GA: EDAW, Inc., 1992), 6-4.

[39] Ibid., 6-4.

[40] Ibid., 6-4–6-5.

after the end of WWII, the Army moved the Army Air Forces School to Maxwell Field which resulted in the development of a new area north of the SOQ area. The school was called Air University (AU) and the campus area was referred to as first Academic Circle and then Chennault Circle, which was also the name of the main circular road around the campus. It was also referred to as Area 1400 because all the buildings were numbered in the 1400 range. Figure 13 illustrates the density in the main core of the site, due to the WWII building expansions as well as the AU campus addition.

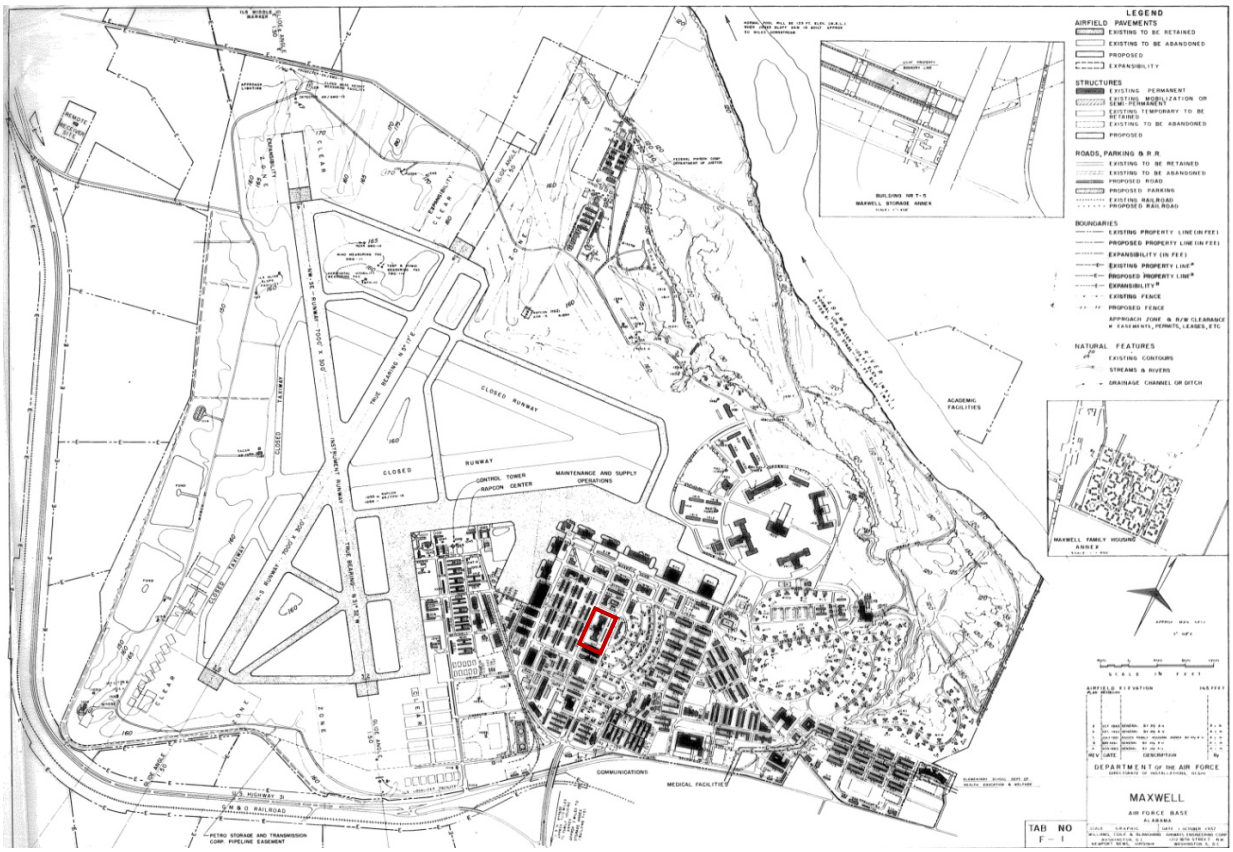


Figure 13. The 1957 master plan, with Building 800 highlighted in red as a point of reference for the temporary barracks that were built to the west and east as well as for Chennault Circle that was built to the northeast (Maxwell AFB Cultural Resources).

Although the layout of Maxwell Field was approved by George Ford and was to employ his planning principles, the resulting layout of Maxwell AFB has been more heavily influenced by several twentieth-century construction phases. The ordered layout of the 1930s plan was quickly overshadowed by the immediate needs of the WWII building efforts and then the piecemeal demolition and redevelopment that was ongoing throughout the late twentieth century and into the early twenty-first

century. Figure 14 maps the construction phases that provided the evolving layout and organization of Maxwell AFB.

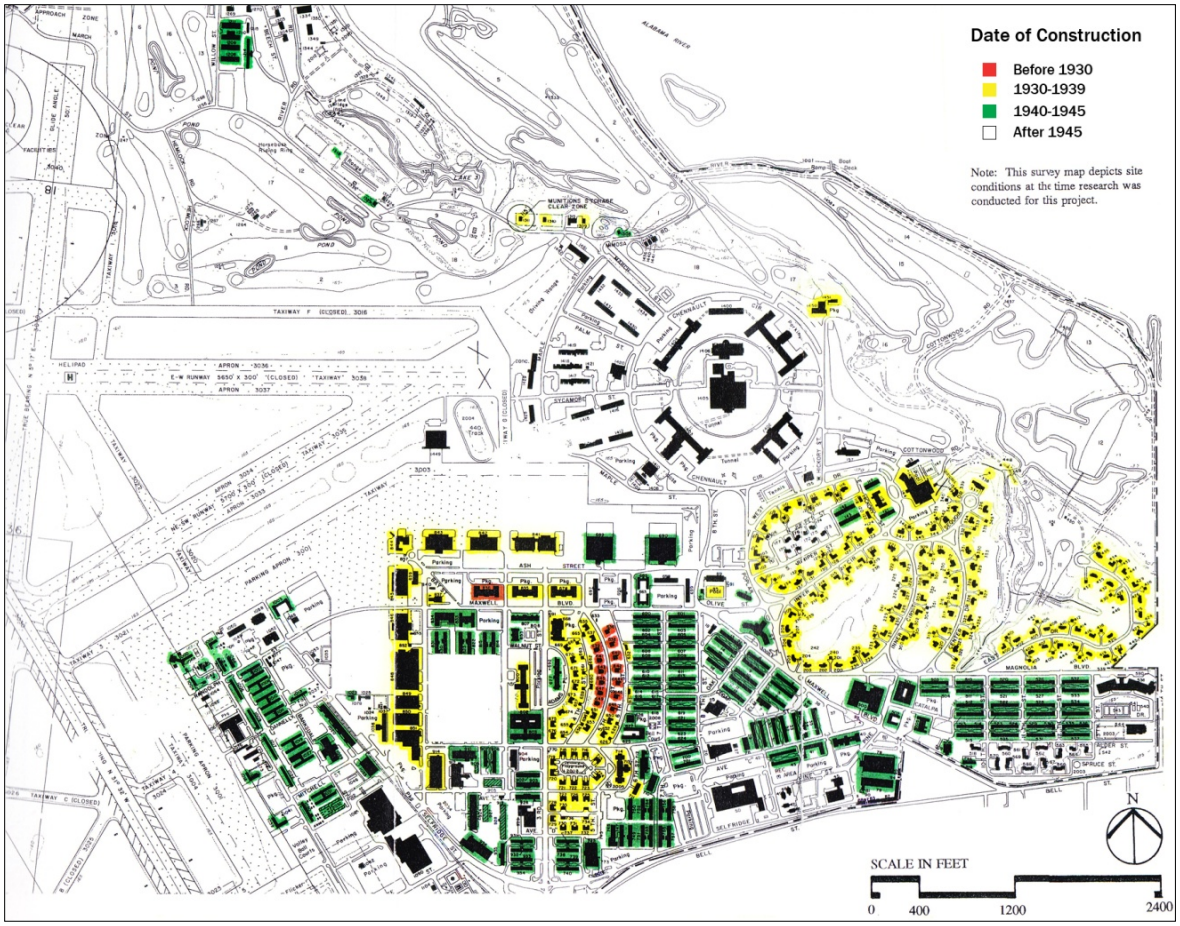


Figure 14. A 1992 drawing showing the color-coded construction phases that have significantly altered the layout of Maxwell AFB (EDAW, Inc.).

3.3 Land use

The military mission directs how the military uses the land, making how the land is used another important landscape feature of a site. Most landscape changes on a military installation are related to the military mission, some directly while others indirectly. Land use areas directly related to the mission at Maxwell AFB include the flight lines, educational buildings, and administration buildings. The cantonment landscape can be divided according to primary land use, which is often signified by how the buildings of an area are used. Areas that support the military mission include the housing areas, administrative areas, recreation, retail/commercial, and education.[41] Because military installations are

[41] Loechl, et al 2009, 70.

planned and organized to efficiently accommodate the military mission, the landscape is often utilitarian where function is prioritized over aesthetics.

Land use planning at the inception of Maxwell Field was predominantly dictated by the demands of early aviation and the supplementary facilities needed to support flying efforts. When the Army began leasing the field in the late 1910s, repair and maintenance facilities dominated the programmatic requirements of the field. With the redevelopment in the 1930s, Maxwell AFB's built environment was designed to meet the requirements of the training mission along with the execution of popular community design principles. Consulting planner George B. Ford emphasized the importance of grouping buildings of similar uses together. Spatially relating buildings of similar programs translated to efficient base operations. In Figure 15, the 1933 base map is color-coded according to land use and programmatic function; not shown on the map is the SOQ area that was under construction during this time. However, the functional areas of the primary core of the base can be analyzed to understand the planning intentions and important spatial relationships in the layout. For example, the large athletic field and abundance of open spaces around Austin Hall emphasize its centrality in the layout and importance to the military mission.

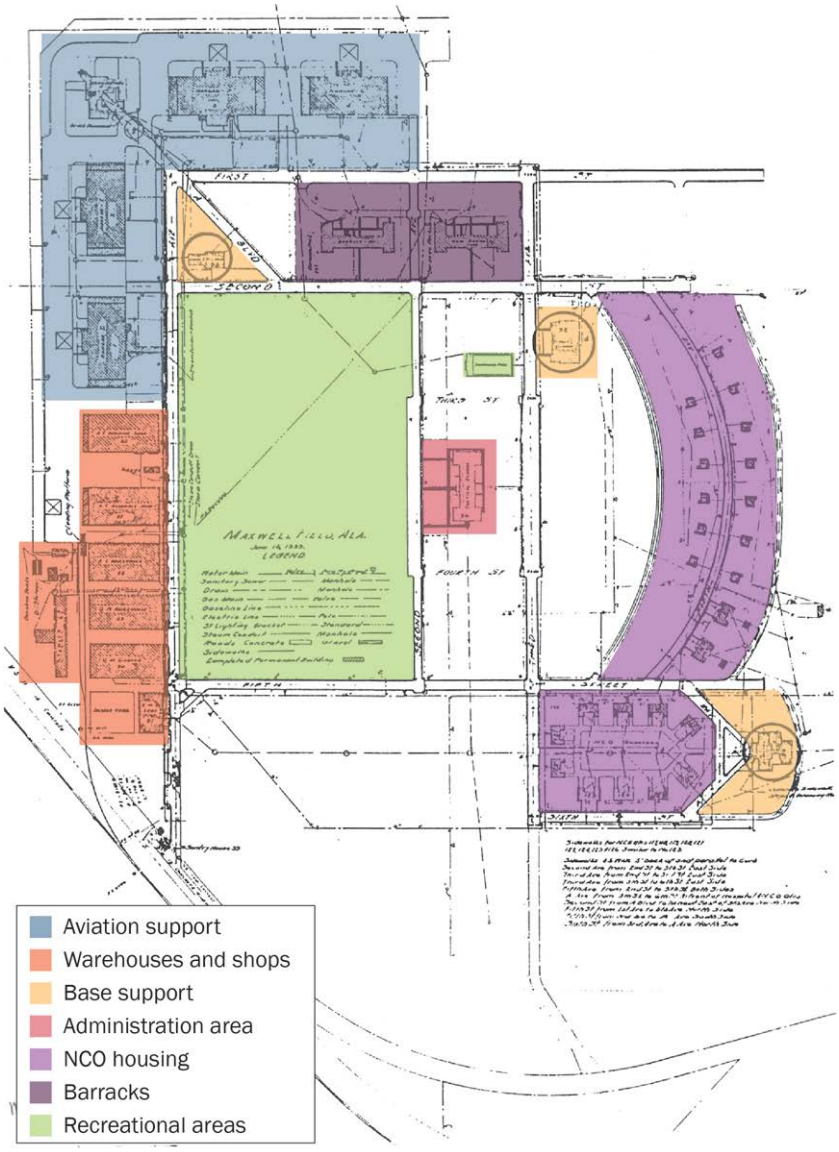


Figure 15. Land use areas in the historic core of Maxwell AFB in 1933 (ERDC-CERL).

Not only were mission requirements met in the physical layout of Maxwell AFB, but like many military installations planned and built during the interwar years, the base plan reflected contemporary trends in city and community development. As a result, Maxwell's geometrical layout physically delineates specific land use areas. For example, the residential areas of the base are all planned around distinct street patterns. The NCO quarters east of the Tactical School were built along curved streets while the NCO duplexes to the south were built around a shared open space. Most unique was the SOQ housing area which arrayed architecturally distinct houses in three tear-drop shaped circles (Figure 16). In this area,

the houses were incorporated with large lawns and open spaces to create a park-like area much different than the uniformity of the rest of the base.

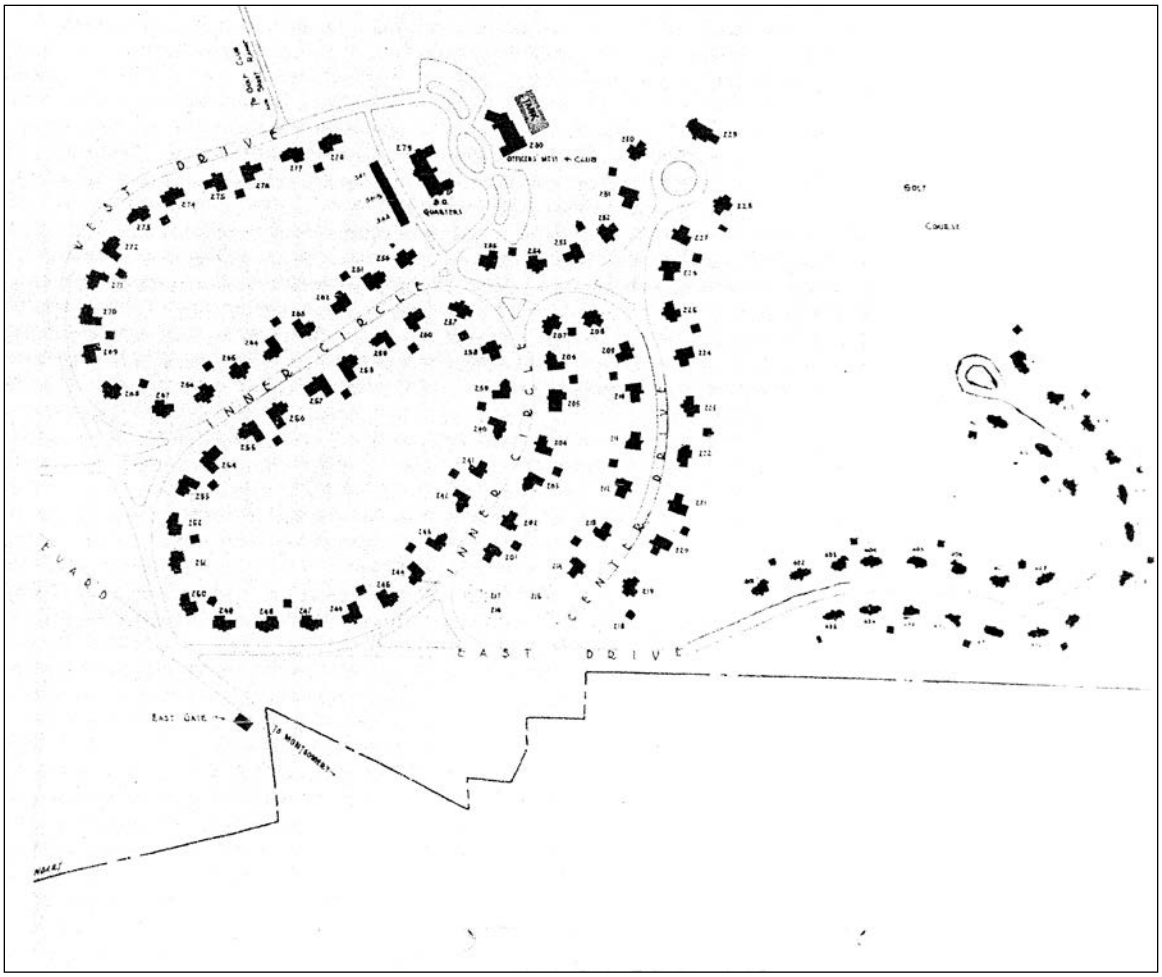


Figure 16. Plan of the SOQ housing area in the late 1930s (Maxwell AFB Cultural Resources).

As the base grew throughout the interwar years and WWII, many of the land uses were modified to accommodate new mission requirements (Figure 17). During this time, Maxwell rapidly acquired land to the south and east to meet the new spatial demands. Most notable was the influx of WWII temporary buildings that filled nearly all of the open spaces in the historic core and extended east to fill the areas south of the SOQ. In the early 1950s the Air Command & Staff School was developed northeast of Maxwell's central core (Figure 17).

Figure 17. The 1966 base plan with land uses color-coded, 2012 (ERDC-CERL).

Land use at Maxwell continued to change throughout the late twentieth century. Eventually most of the WWII temporary buildings were demolished, and additional administrative, training, and residential areas were developed.

3.4 Expression of military cultural traditions

Military cultural traditions are reflected on military installations through both spatial organization and design aesthetics. The military is a unique culture that values hierarchy, discipline, utility, and patriotism. These ideologies are physically reinforced in the landscape giving military installations a distinct appearance and sense of place that makes their design easily recognizable.[42] The main principle of installation development is to accommodate the mandated mission as quickly and

[42] Loechl et al 2009, 73.

efficiently as possible.[43] This often leads to a utilitarian landscape in which function is emphasized over aesthetics. Physically representing the ideals of hierarchy, discipline, utility, and patriotism can occur at the site-wide scale and at the building scale.

For example, hierarchy can be displayed though the organization of land uses as well as through a building's scale, massing, styling, and extent of landscaping. Maxwell AFB is organized so that similar functional uses are combined. These areas are arranged over the physical site to take advantage of naturally occurring topography which could further emphasize rank or importance. This spatial organizational hierarchy physically reflects the mission of both the Army and later, the Air Force. Within specific land uses, the location of significant buildings can connote the importance of their function. For example, in the housing areas, the Commanding General's residence is prominently located and is also more ornamented and landscaped than the surrounding quarters (Figure 18). At Maxwell, the original headquarters building was centrally located within the base. This provided efficient access to many of the base's operations. Land uses were also separated so that residential areas were removed from the flight lines. For example, the original hospital was constructed away from the flight lines in the south part of the base, and the SOQ area was located on the eastern side of the base.

Figure 18. The Commanding General's quarters located at the terminus of Sequoia Street, 2012 (ERDC-CERL).

[43] Loechl 1996, 70.

Like military hierarchy, the cultural value of uniformity is highly visible throughout Maxwell AFB at several scales. The layout of the historic core of the base uses evenly spaced buildings and geometrical alignments to convey an overall uniformity to the site. At a smaller scale, buildings of similar scale, massing, and styling are grouped together to provide a unified whole. Uniformity is further emphasized throughout the base through the widespread use of buff-colored adobe with red tile roofs in building construction. Although the buildings might vary slightly in their detailing or exterior ornamentation, the overall visual effect is unified through the basic physical construction characteristics. Figure 19 shows the uniformity conveyed through the housing in the SOQ area.

Figure 19. Uniformity is displayed in the SOQ area through similar building materials and architectural styling, 2012 (ERDC-CERL).

Utility is another standard prioritized by the military. In base layout, utility is translated into a logical arrangement of spaces. Maxwell's base planning and design choices represent utility in the arrangement of buildings and their associations to the airfield, schools, and residential areas. Maxwell AFB was designed so that the flight lines and aviation support areas were easily accessible from around the base. The Base Operations/terminal building was located at the intersection of the north and west rows of hangars. South of the west row of hangars was the

warehouse and supply area that directly supported the base's aviation and utilitarian activities (Figure 20). Additionally, the enlisted men's barracks displayed utility since they were located south of the northern flight line which provided the men direct access to the hangars (Figure 21).

Figure 20. Utility is displayed in design and construction of warehouses, 2012 (ERDC-CERL).

Figure 21. Former enlisted men's barracks also displayed the utility standard by being located near the north flight line, 2012 (ERDC-CERL).

Patriotism can be physically represented though symbols, flags, and monuments. These are small-scale details that are arranged throughout Maxwell AFB and are often associated with important or significant buildings. Individual monuments, memorials, and markers are discussed in Section 3.9, but their placement within the base often signifies their importance. For example, the ACTS memorial is located in line with one of primary entrances to Austin Hall (Building 800) (Figure 22). West of Austin Hall (Building 800) is the 42nd Air Base Wing Headquarters (Building 804), where the base flag pole is located on the east side and at the front of the building (Figure 23).

Figure 22. The Air Corps Tactical School memorial west of Austin Hall is placed in a prominent location to signify its importance, 2012 (ERDC-CERL).

Figure 23. The base flag pole is prominently located to the front and east side of the 42nd Air Base Wing Headquarters building, 2012 (ERDC-CERL).

3.5 Transportation networks

Transportation networks on military installations are an important characteristic of military landscapes because the movement of troops and equipment is vital to the military mission. Most military transportation systems have a distinct hierarchy to facilitate efficient mobilization of troops and distribution of supplies.[44] In general, Army installations were planned to connect with regional systems of trails, primary and secondary roads, railroads, and navigable waterways.

The location for Maxwell was originally chosen by the Wright brothers because the area's weather and topography was accommodating to their flight experiments. However, the site was also near the Louisville and Nashville Railroad which the Wrights used to ship their biplane to Alabama in the spring of 1910.[45] The railroad and the highway that ran south of the site were important features when the Army took over the flying field as an aviation repair depot. The highway was the major thoroughfare between Montgomery and the major manufacturing city of Birmingham, Alabama (Figure 24).

[44] Loechl et al 1996, 77.

[45] Eric C. Poplin and Bruce G. Harvey. *National Register of Historic Places Nominations Maxwell Air Force Base Montgomery County, Alabama.*. Atlanta, GA: Brockington and Associates, 2001, 8.

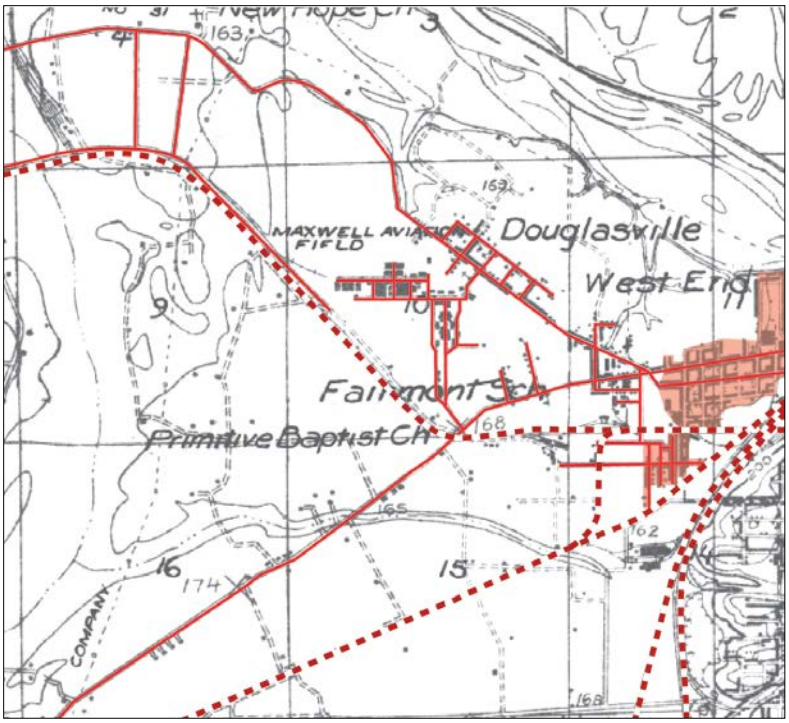


Figure 24. The road and railroad network around Maxwell Field in 1927. The railroads are represented with the dashed line and roads are highlighted with a solid line (USGS Historic Topographic Maps).

Through the 1920s and 1930s, many of the local roads around Maxwell Field were unpaved (Figure 25). However, as Maxwell grew throughout these same decades, the transportation networks were modified in response. Most notably, as Maxwell appropriated land to the south and west, the highway and railroad had to be rerouted around those areas. By the 1950s, US Highway 31 and the Gulf, Mobile and Ohio (GM&O) Railroad south of the base were moved to their current locations farther south (Figure 26).

Figure 25. 1931 aerial view of the network of roads and railroads surrounding Maxwell Field (NARA 342-FH Box 1069 B19801).

Figure 26. The 1957 base map showing how the GM & O) Railroad and US Highway 31 were rerouted to accommodate Maxwell's growth. The railroad is marked with a dashed line and the highway with a solid line (Maxwell AFB Cultural Resources).

The 1920s base plan established two entrances to Maxwell Field. The primary entrance was located off Selma Road and what later became Third Avenue in the 1930s plan. The base's second entrance was from the north, off Washington Ferry Road. In 1921, the base was organized loosely around two main streets—one that ran from the main entrance north toward the flight field, and one that ran east–west and connected the aviation buildings to the west with base services located to the east. The northern entrance to the Field was connected to this east-west road by use of a roundabout, around which were located the Commanding Officers' Quarters and infirmary (Figure 27).

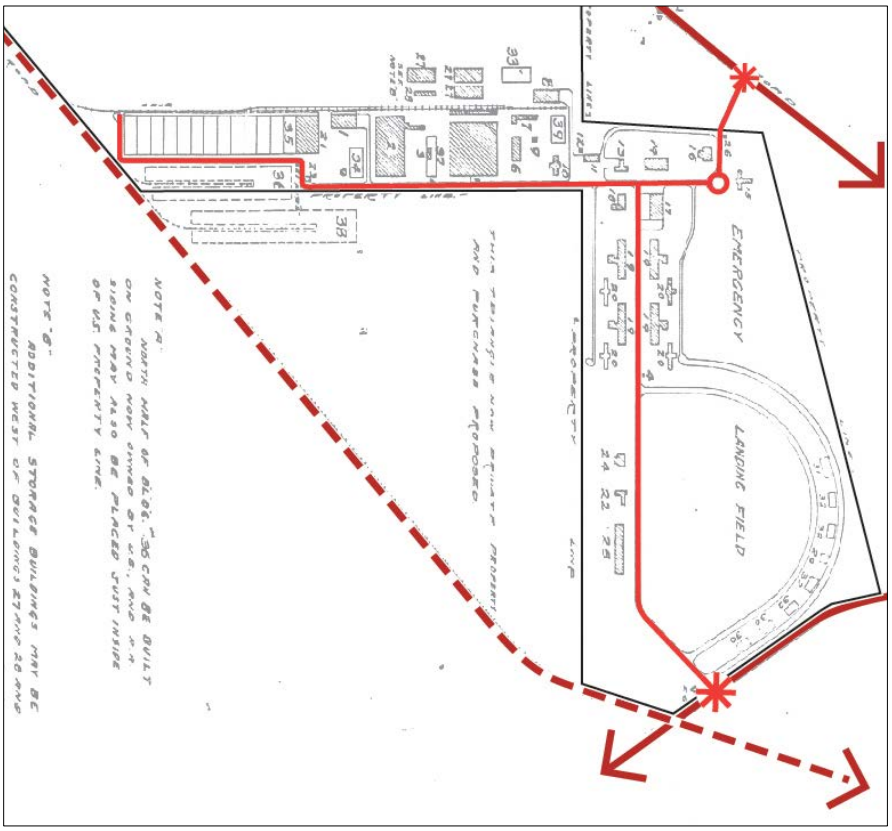


Figure 27. The primary roads and entrances of Maxwell Field in 1921. Image rotated so that north is to the top of the page (ERDC-CERL).

In the early 1930s, the main entrance to Maxwell Field was marked by a sentry house with concrete columns topped with planters flanking the road (Figure 28).

Figure 28. Maxwell Field's main entrance in 1930 (Maxwell History Office).

When Maxwell Field was redeveloped through the early 1930s, the road network of the base was expanded and modified. With the acquisition of land southwest of the 1920s cantonment, the roads were laid out in a grid extending west of the primary north-south road of the 1920s. The origin point of the road grid was in the northwest corner. Roads running east-west were named as numbered streets, and roads running north-south were named as avenues. Third Avenue was the former primary north-south road through the base. Located east of Third Avenue was a new housing court between Fifth and Six Streets which terminated in a distinct chevron in front of the new hospital (Figure 29). The road expansion included adding an additional southern entrance off US Highway 31, formerly known as Selma Road. The base also expanded to the east with the development of the SOQ area and its unique teardrop-shaped road network. An east gate was added at Maxwell Boulevard. Because of the SOQ development, Washington Ferry Road was removed, as was the original second, northern entrance to the base off Washington Ferry Road (Figure 30).

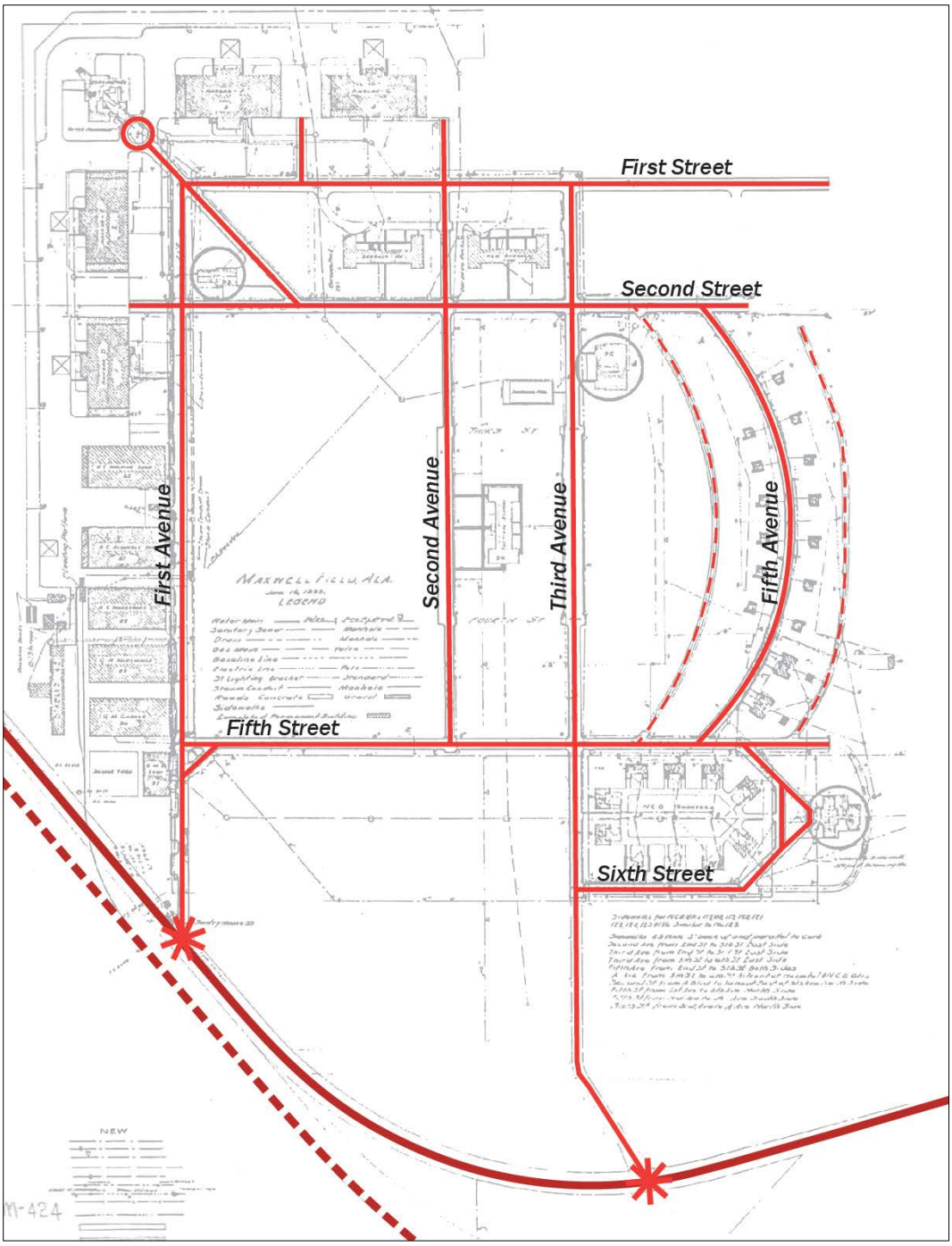


Figure 29. The reconfigured network of roads in the main core of Maxwell Field in 1933. The dashed lines on either side of Fifth Avenue designate the roads to be built in this area as part of that decade's redevelopment, 2012 (ERDC-CERL).

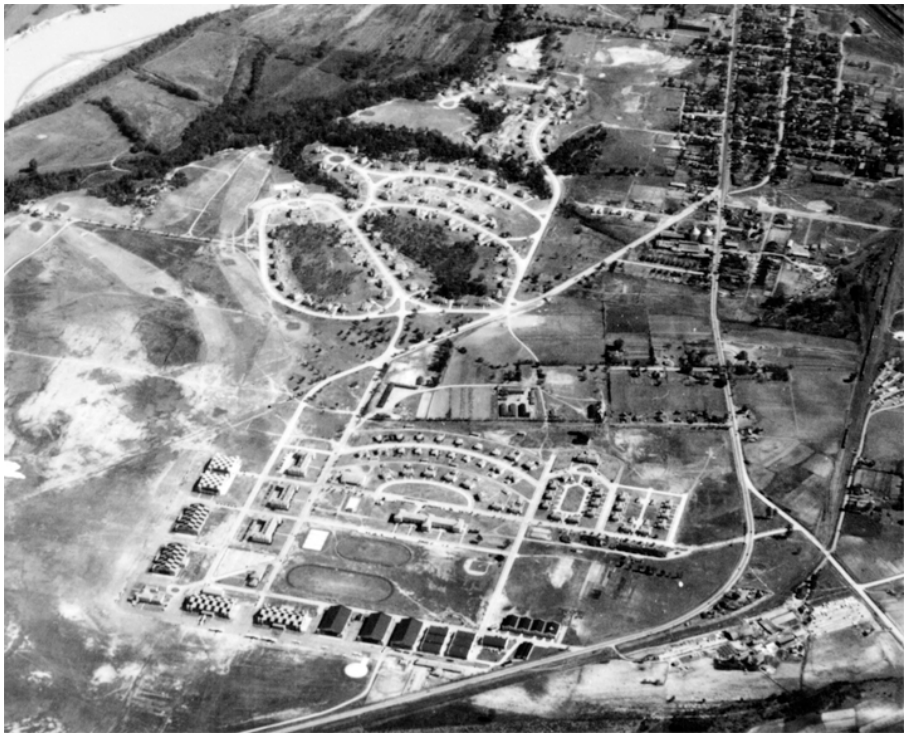


Figure 30. The gridded streets of the main core are contrasted with the curving street pattern of the SOQ area; image taken around 1935 (Maxwell History Office).

The WWII building campaign had a great effect on the 1930s road network. In the original core, the road pattern remained as a grid, but the use of the road network was radically changed by land acquisitions to the east. These areas were developed independently of the established grid system, which meant that the primary "through" streets of the old network were no longer connected to the newly acquired areas. Additionally, during this time, entrances to the base were realigned when U.S. Highway 31 was relocated south of the cantonment to provide room for new runways. Moving the entrances also resulted in developing a new network of primary roads connecting through the base. Southern entrances were no longer at First and Third Avenues, but were located at points that ran through the newer sections of the base and around the perimeter of the original core (Figure 31).

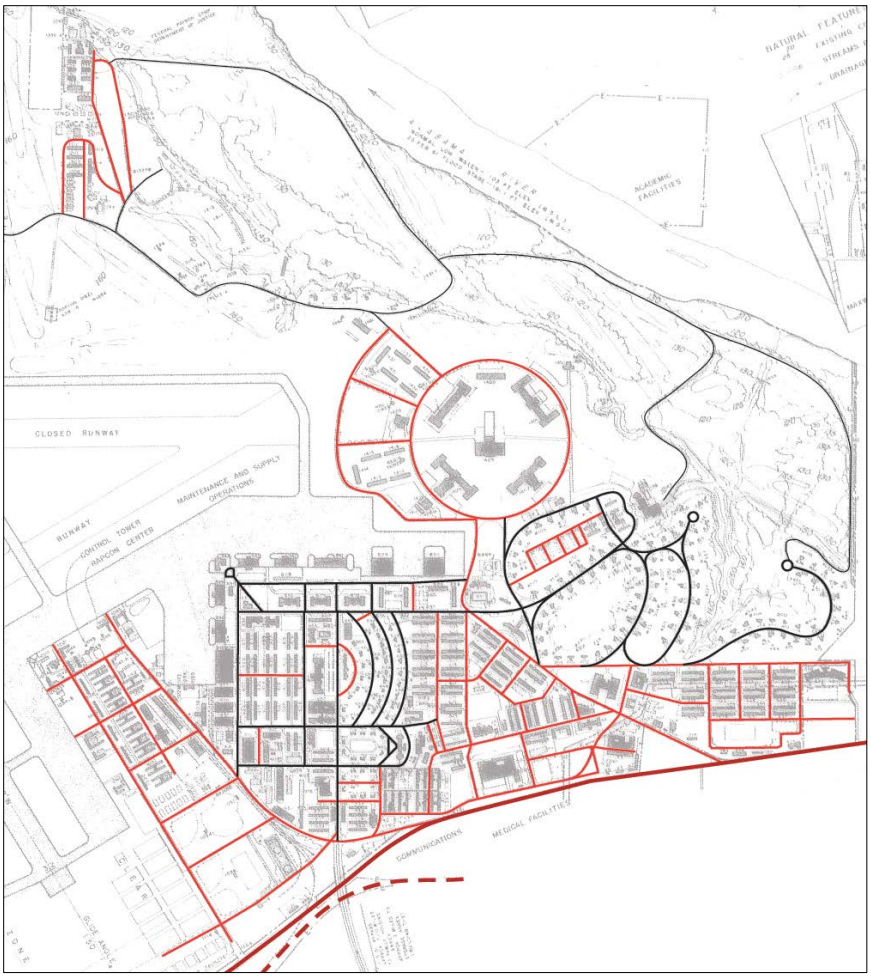


Figure 31. On this 1957 base plan, road additions associated with WWII and after are highlighted in red, and the 1933 road network is drawn in black (ERDC-CERL).

During the early 1950s, the AU was developed north of the SOQ area. The Air University layout was governed by a large circular road around which the buildings were evenly spaced. The circular road was connected to the rest of the base by Eighth Street and Poplar Street. The resulting road system would be retained as Maxwell changed throughout the second half of the twentieth century. Currently, there are three entrances to the base. One on the east side of the base off Bell Street which connects to Maxwell Boulevard, and one at Day Street and Air Base Boulevard. The Kelly Street gate is normally only open on weekdays and connects Kelly Street with Maxwell Boulevard south of the runways.

The 1930s base plan provided stipulations for sidewalks. Currently, an extensive sidewalk system extends throughout all areas of the base.

3.6 Clusters of buildings and structures

Clusters are groupings of buildings and structures, often similar in style, that function as a cohesive unit. Clusters are usually designed to create a symbiotic relationship with the exteriors and interiors, relating to one another through similar scales, mass, styles, or functions.[46] The footprints of buildings, their masses, the spaces between the buildings, and the circulation between buildings are integral to defining the historic landscape.

A problem common to military installations is the need to construct new buildings within historic districts. The problem needs to be addressed so that these new buildings do not seem out of place and detract from the integrity of historic districts. New buildings can be designed to minimize negative effects on a historic district. Design elements such as massing, materials, colors, roof type, and others can be manipulated so that new construction will be less intrusive than buildings designed without regard for the historic environment. Much like the art of camouflage—where one does not attempt to look like a tree but rather to blend in with the trees—new buildings, while not attempting to recreate or mimic the historic style, can be designed in such a way that they appear to fit into their historic surroundings.[47] Also important is how buildings architecturally relate to one another. Because adobe was a predominant construction material building at Maxwell, there is an architectural compatibility throughout the base. Also consistent are the massing and architectural detailing of these buildings and open spaces.

The base plan for Maxwell was designed around the idea that similar functions would be grouped together. This meant that the buildings and spaces required for these functions would form cohesive clusters. At Maxwell, the aviation support facilities including hangars, control tower, and repair workshops were clustered near the landing strips and conveyed their similarity through their utilitarian styling. Likewise, the buildings that comprised the tactical school were all constructed of adobe with red tile roofs and used the Spanish Eclectic architectural style. The NCO residential areas close to the Tactical School are also similarly grouped and styled. The SOQ area also groups architecturally similar buildings and structures. Unlike the majority of buildings at Maxwell, though, the SOQ

[46] Loechl, et al 2009, 87.

[47] Enscore & Webster 2009, 141-142.

area used the French Provincial architectural style. By using an architectural style different than those used in other areas of the base, the importance of the SOQ was spatially signified.

The clusters of buildings at Maxwell have been evaluated according to their functional use, the proximity of buildings to one another, and where on the base they are located. The following report sections are divided according to land use, but also discuss clusters of buildings according to period of construction. This allows the historic core of the base to be described through several different functions that historically were located there and the current conditions.

3.6.1 Historic core

The operational core of Maxwell is comprised of several different programmatic uses and building groups. This area was originally the center of the base and contained important functions like base operations, support buildings, enlisted men's barracks, NCO quarters, recreational spaces as well as the flight lines and aviation support buildings.

3.6.1.1 Flight lines and aviation support

The flight lines and aviation support area encompasses ten aviation-related buildings organized in an L-shape, located north and west of the historic core. The district includes six hangars, three warehouses, and the base operations/terminal building. Nine of the hangars and warehouses were built in the early 1930s and were designed in the Art Moderne style with articulated vertical elements at the building corners. These 1930s buildings also feature multi-pane industrial windows set in metal frames and cream-colored stucco walls. The tenth building in this district was a hangar built in 1945. This hangar (Building 689) was built without any architectural ornamentation or references to a specific architectural style.

Both arms of the flight line originally faced runways; the western arm is now separated from the runway by modern buildings, while the northern arm still faces the former apron. By 1938, buildings associated with the flight lines included the hangars as well as an engineering building, an airplane assembly building, a supply building, and warehouses.

The most prominent building in the flight line is the Base Operations/Terminal building (Building 844) located at the intersection of

the north and west flight lines (Figure 32). The building is two stories and has served as an operations center, headquarters, and a facility for hanging and folding parachutes. The building was designed in the Mediterranean Revival architectural style and used cream-colored stucco and red tiles on the roof like other buildings at Maxwell (Figure 33). Toward the runways is a three-story control tower which now has a flat top and projecting cornice, although it once featured a crenellated top.

Figure 32. Operations/Terminal building in 1946 (NARA 342-FH Box 2109 B47590).

Figure 33. Operations/Terminal building (Building 844) in 2012 (ERDC-CERL).

Four of the buildings on the flight line (Buildings 842, 843, 845, and 846) retain their original early 1930s configuration. In these end-gabled buildings, large multi-paned windows span all four walls. The gable ends of the buildings feature large glass doors that slide into the side walls. Each of the corners, on these buildings, is accented with piers that are taller than the eave line and feature linear design elements. The corner details convey an Art Moderne or Art Deco look to these structures (Figure 34). These hangars were constructed with an open steel frame on the interior that was integrated into the hollow terra cotta tile walls.[48]

Figure 34. 1930s hangar on the west flight line, 2012 (ERDC-CERL).

[48] Maurie Van Buren and Jody Cook, *Historic Maxwell Air Force Base: Driving Tour Booklet*. Department of Defense, Legacy Resource Management Program, 1995, 16.

Building 689 was built in 1945, along with another similar hangar that was demolished in the mid 1990s. Building 689 was designed to house the B-29 *Superfortress* bomber and was considerably larger than the 1930s hangars. It was located on the north flight line, the eastern-most hangar of the row. The large structure had a barrel roof, unlike the gabled roofs of the 1930s hangars, and featured simplified corner piers. The most dominant feature of the hangar was the extension of one end door to house the B-29's large tail wings (Figure 35).

Figure 35. 1945 hangar (Building 689) built for the B-29 *Superfortress*, 2012 (ERDC-CERL).

Buildings 848, 849, 850 and 851 line Arnold Street and served as maintenance sheds and warehouses that supported the base's aviation activities (Figure 36). Like the hangars, the warehouse buildings were constructed with long banks of windows on the side walls and gable ends. The entrances to the warehouses were emphasized by stepped parapets and slightly projecting piers. The southern-most warehouse (Building 851) has been converted to the Base Exchange and because of this conversion, it does not retain its historic integrity (Figure 37).

Figure 36. Partial view of the line of warehouses on the west flight line along Arnold Street. View is looking south, 2012 (ERDC-CERL).

Figure 37. Former warehouse adaptively reused as shops for the Base Exchange, 2012 (ERDC-CERL).

Also associated with the aviation support buildings is Building 1036, the former horse stables. The building was constructed in 1934 and was located west of the southern-most warehouse (Figure 38). The building was constructed (as were many other buildings on the base) with cream-colored stucco walls and a red-clay tile roof (Figure 39).

Figure 38. Horse stables (left) and warehouses (right) in the late 1930s (Air Force Historical Research Agency).

Figure 39. Former stables now converted to storage, 2012 (ERDC-CERL).

Across Arnold Street from the aviation support warehouses is a line of maintenance shops. These shops were built in 1934 as a series of connected buildings with peaked roofs (Figure 40).

Figure 40. Shops along the east side of Arnold Street, 2012 (ERDC-CERL).

3.6.1.2 Base operations

The operational core of Maxwell AFB was planned around Austin Hall (Building 800). Building 800 was constructed in 1931 to serve as the headquarters and classroom building of the ACTS. The building was designed by architects at the U.S. Army Office of the Constructing Quartermaster. The original building was designed as an I-shape with wings of equal size at each end. However in 1934, the building was changed when the south wing was enlarged by adding rooms and porches to both the upstairs and downstairs, and adding the southern half of what is the current building. Austin Hall was constructed using elements of the Spanish Mission architectural style with red-clay tile roofing and Romanesque entryways (Figure 41).[49]

Figure 41. Austin Hall's west façade with the original 1931 section of the building (to the left) and the enlarged central wing visible, 2012 (ERDC-CERL).

Additional efforts were made to construct Austin Hall from durable, permanent materials. The structure of the building was made of steel-reinforced concrete and steel girders. The roof was red-clay tiles with a stucco exterior. Five of the entrances are framed by ornamental

[49] Van Buren and Cook, *Historic Maxwell Air Force Base: Driving Tour Booklet*, 23.

surrounds; the two main entrances are situated on the west side of the building equidistant between the wings.

As Maxwell grew to meet the training and personnel increases necessitated by WWII, much of the open space in the historic core were filled with WWII temporary structures. The administrative space, formerly provided only at Austin Hall, was supplemented with new construction around the base. However, because the construction efforts had to be executed quickly, many of the new administration buildings were not grouped according to similar use and were not located near Austin Hall. For example, Building 1 was constructed to serve as base headquarters, but was located just west of the SOQ area facing Maxwell Boulevard (Figure 42).

Figure 42. An undated image from when Base Headquarters was located in Building 1 (Maxwell AFB History Office).

Eventually, as the Maxwell mission changed after WWII, buildings were converted from their original purposes to meet new requirements. For example, the three 1930s enlisted men's barracks (Buildings 836, 835, and 678) were converted to administrative use. Building 1 was eventually converted into the Youth Activities building. The 42nd Air Base Wing

Headquarters (Building 804) was located west of Austin Hall after the WWII temporary barracks built on the 1930s recreational field were demolished. The building was designed as a square, with a courtyard in the interior and wings extending at the corners and mid-points of each side. The main entrance to Building 804 faces Austin Hall to the east, and parking lots are located on the north, south, and west sides. The building was designed to blend in with the architectural style used for the buildings constructed during the interwar years and features pitched red-clay tile roofs and stucco-like walls (Figure 43).[50]

Figure 43. Building 804 main entrance, 2012 (ERDC-CERL).

3.6.1.3 Base support buildings

During Maxwell's development in the late 1920s and through the 1930s, the base support functions were centrally located within the base. Grouping the base support areas near the main core of functions provided convenient access from many of the residential areas, including the NCO housing and enlisted men's barracks. These support buildings included the mess hall, hospital, Post Exchange (PX), social center and recreational

[50] Van Buren and Cook, *Historic Maxwell Air Force Base: Driving Tour Booklet*, 22.

areas, theater, school, and other services that made living on the base amenable to the soldiers and families quartered there. However, during the rapid WWII-related growth at Maxwell, the planning and grouping of these related buildings became secondary to meeting the spatial demands of the mission. As a result, many buildings that were constructed during the late 1930s and through the 1940s are located without strict regard for the planning principles of the early 1930s.

The support buildings constructed during the early 1930s that were part of the George B. Ford-approved plan were the station hospital (Building 714), the associated nurse's quarters (Building 711), and the PX (Building 668). The hospital was located south of the noisy flight lines and was just east of the NCO housing court. The building was designed by the Quartermaster General in consultation with the Surgeon General to provide a facility for sick soldiers that was equal to the very best available at any civilian institution (Figure 44). Associated with the station hospital were the nurses' quarters (Building 711) and Buildings 710 and 712. When new hospital faculties were constructed in 1960s, the former station hospital was converted to serve as the Civil Air Patrol National Headquarters.[51]

Figure 44. Former station hospital was built in 1931 and located away from the noise and activity of the flight lines. Now the building serves as the Civil Air Patrol National Headquarters, 2012 (ERDC-CERL).

[51] Van Buren and Cook, *Historic Maxwell Air Force Base: Driving Tour Booklet*, 29.

The Post Exchange (Building 668) was located near the NCO quarters and the enlisted men's barracks (Figure 45). The building has since served as the River Front Inn and is now used as the Enlisted Dining Hall (Figure 46). (As mentioned previously, the current Base Exchange is now located on the site of a former aviation-related warehouse, Building 851.)

Figure 45. Maxwell Base Exchange in 1954 (NARA 342-B Box 293).

Figure 46. The former Base Exchange now converted for use as the Enlisted Dining Hall, 2012 (ERDC-CERL).

During the site developments of the early 1940s, two Post Chapels and a Post Office were constructed. Chapel 1 and Chapel 2 were built in 1942 as part of the WWII building program. They were both built in the New England Congregational style with Chapel 1 being slightly smaller than Chapel 2. A third chapel was built in 1965 and was named Chapel 3. However, in the 1990s, the original Chapel 1 was demolished and the original Chapel 2 was renamed Chapel 1. The chapel that had been built in 1965 became Chapel 2.

The current Chapel 1 is located north of Building 1, which was the new Base Headquarters building. This chapel faced the SOQ area at the intersection of Inner Circle and Poplar Street. Its design was a standard WWII chapel layout that was finished with stucco and subtle architectural detailing that aesthetically connected it with the French Provincial architectural style of the SOQ quarters (Figure 47).

Figure 47. North façade of the renamed Chapel 1 built in 1942, 2012 (ERDC-CERL).

The current Post Office (Building 40) is located in the southeastern section of the base across Maxwell Boulevard from Building 500. The Post Office was constructed with a similar layout as Building 800, but on a much-reduced scale. The building has served at different times as a warehouse and base print shop. The building was oriented lengthwise along Kirkpatrick Avenue with two rectangular wings at the east and west ends. The entrance was located in the middle and was articulated with another rectangular section that featured a gabled roof line (Figure 48).

Figure 48. Main entrance and north façade of the current Post Office, 2012 (ERDC-CERL).

Base support buildings that were built during the late 1940s and throughout the mid-twentieth century were the swimmers bath house (Building 89) built in 1946, the base theater (Building 26) built in 1949, the base school (Building 538) built in 1964, and Chapel 2 (Building 155) built in 1965. Details and photos for each of these buildings follow.

The base swimming pool was located near the SOQ area east of 8th Street. The pool was constructed in 1934and the bath house was added in 1946. Currently, the area is surrounded by a tall privacy fence (Figure 49).

Figure 49. Swimming pool and swimmers bath house, 2012 (ERDC-CERL).

The base theater was designed with a streamlined architectural aesthetic that reflected the emerging popularity of modern architecture when it was built in 1949. The theater was located within the largest grouping of the WWII barracks east of the NCO bungalows. The theater was painted to match the stucco of the older buildings on the base, but that was the only architectural similarity shared between these buildings (Figure 50).

Figure 50. Base theater built in 1949, 2012 (ERDC-CERL).

The base school was built in 1964 and was located along Magnolia Drive on the eastern edge of the base just south of the SOQ area. The school was designed with two wings that angled away from a central section with play areas on the south side of the building. The architectural style for the building diverged from the Spanish Mission and French Provincial styles of other sections of the base. Instead, the school was designed in the popular mid-century modern style of the 1950s and 1960s (Figure 51). The school was expanded with a large addition south of the original building.

Figure 51. The base school was built in 1964, 2012 (ERDC-CERL).

Chapel 2 was built in 1965 and, like the base school, featured contemporary architectural styling rather than the more prevalent Spanish Mission or French Provincial architectural styles used previously. Chapel 2 is located between Area 1400 and the northern edge of the SOQ area. The building consists of a large rectangular section with a steeply peaked roof clad in copper on the east side and a lower, flat-roofed rectangular section on the west side. The main entrance is located on the southern side of the building and features a stained-glass window that fills the space created by the tall, peaked roof. Cream-colored limestone was used for the exterior walls and the outdoor sign (Figure 52).

Figure 52. Now known as Chapel 2, the third chapel to be built at Maxwell was completed in 1965, 2012 (ERDC-CERL).

3.6.2 Chennault Circle/Area 1400

In November 1945, the Army Air Forces School of Applied Tactics was relocated from another Army airfield at Orlando, Florida, to Maxwell Field to consolidate the Air Force schools. Four months later, the school was redesignated as the AU, and plans for constructing an area to house the increased number of professional schools were undertaken. By the early 1950s, construction was underway on a new development north of the SOQ area. The arrangement of the AU campus was dictated by a circular road called Chennault Circle along which five classroom buildings were arrayed with the library located in the center of the circle. The original plan for the area included three clusters of BOQs west of the main circle of buildings and two more winged buildings were planned on the east side of the circle (Figure 53).

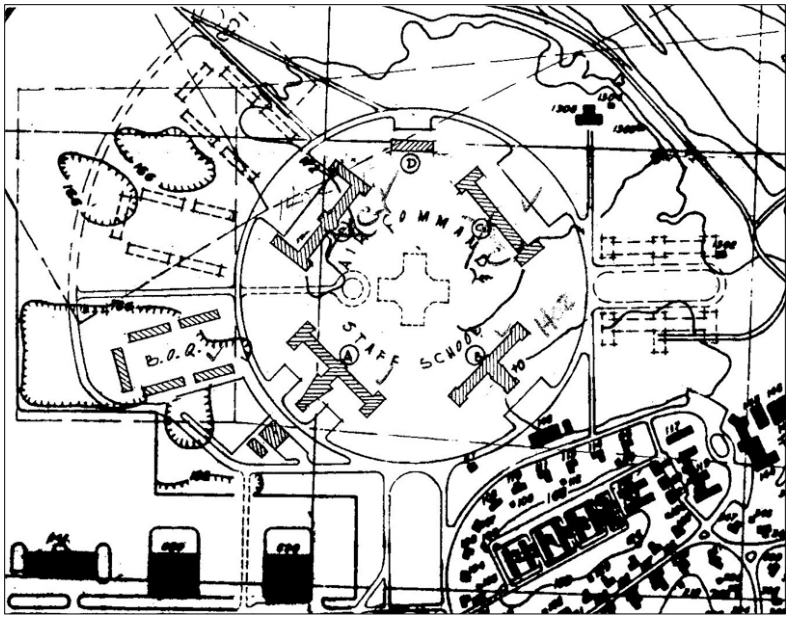


Figure 53. The layout of Air University in 1953 (Maxwell AFB Cultural Resources).

As the AU campus was developed throughout the 1950s, modifications were made to the original plans. By 1957, the area contained six buildings within the main circular road, two Visiting Officers Quarters (VOQ) clusters that each contained five buildings, and three smaller buildings on the western side of the circle (Figure 54).

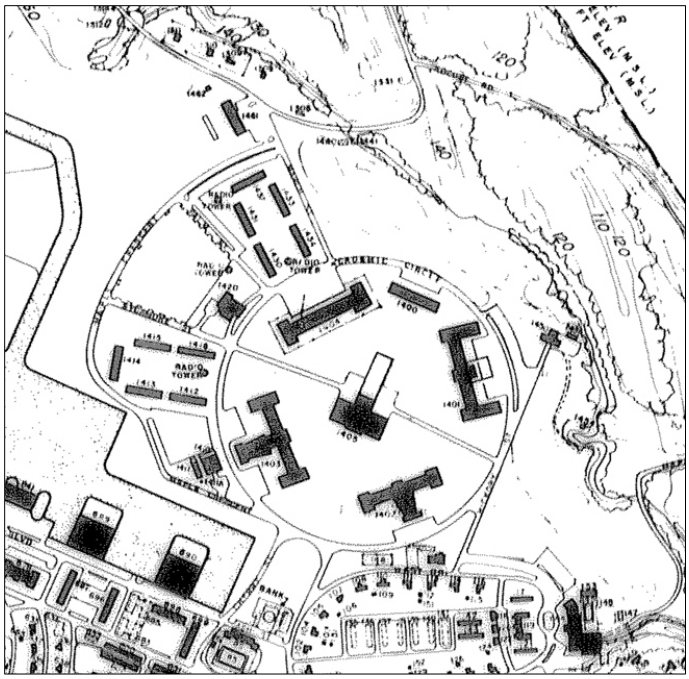


Figure 54. The Air University campus in 1957, the drawing is rotated slightly to the northeast (Maxwell AFB Cultural Resources).

The AU's buildings were designed in the International style of architecture which employed multi-level flat roofs and smooth uniform concrete walls with large expanses of glass. During the 1960s, a buff-colored brick veneer was added to the buildings to soften the appearance of the concrete buildings. The major buildings of the campus were Fairchild Library (Building 1405; Figure 55); Squadron Officer School (Building 1403; Figure 56); Ira C. Eaker College for Professional Development (Building 1404; Figure 57); the College of Aerospace Doctrine, Research, and Education (CADRE; Building 1400); Air War College (Building 1401; Figure 58); and the Air Command and Staff College (Building 1402).

Figure 55. Fairchild Library (Building 1405), 2012 (ERDC-CERL).

Figure 56. Squadron Officer College (Building 1403), 2012 (ERDC-CERL).

Figure 57. Ira C. Eaker Center for Professional Development (Building 1404), 2012 (ERDC-CERL).

Figure 58. Air War College (Building 1401), 2012 (ERDC-CERL).

In the 1970s, two additional VOQs were added between the barracks wedges along the western edge of Chennault Circle and the golf course driving range.

During the 1980s and 1990s, extensive developments were undertaken at the AU campus. Around Chennault Circle, buildings were expanded while one of the VOQ areas to the west was partially demolished. Of the three western wedges, only the northern group of VOQs remained unchanged (Figure 59). In the middle wedge, additional barracks were constructed where there was a parking lot. The VOQ grouping in the southern edge was partially demolished for newer barracks to be constructed (Figure 60). Just west of this area, the Officer Training School (OTS) was developed in the early 2000s.

Figure 59. VOQs associated with the Air University (Buildings 1430-1434), 2012 (ERDC-CERL).

Figure 60. Aerial view of Chennault Circle in 2012 (bing.com/maps).

3.6.3 Residential areas

Maxwell AFB's residential areas consist of dormitory groupings, NCO quarters, and the visually distinct SOQ area. The majority of the construction for these areas occurred during the base buildup of the 1930s; however, one of the enlisted men's barracks (Building 836) and thirteen NCO bungalows were built during 1928 (Buildings 638-649). The barracks and NCO bungalows and duplexes were constructed with the Spanish Mission architectural style that was used throughout the historic core of the base, but the SOQs were designed using French Provincial architectural styling.

3.6.3.1 Enlisted men's barracks

The enlisted men's barracks were located just south of the northern flight line (Buildings 836, 835, and 678). The three dormitories were designed to accommodate 163 men per building. A goal of the Army Housing Program of 1926, under which the barracks were constructed, was to provide showplaces of Army housing. All three barracks featured similar design and construction standards. Construction materials included steel framing

and reinforced concrete, which were chosen for their durability and fireproofing. The roofs were red-clay tile and had many dormer windows to increase ventilation. The layout of the buildings was similar to the original H-shaped footprint of Austin Hall (Figure 61). The barracks were long rectangles with wings at each end. The main entrances were articulated by a slight protrusion on the south facades and limestone door surrounds designed to reflect the Spanish Mission style of architecture (Figure 62). On the north facades were large screened porches which were used as sleeping porches for all floors during hot summer months. Each barracks building had a mess hall and kitchen, a tailor room, a barber shop, and storerooms.

Figure 61. Former barracks converted to the Airman Leadership School (Building 678), 2012 (ERDC-CERL).

Figure 62. Example of the main entrance's door surround detailing that is featured on the three former enlisted men's barracks, 2012 (ERDC-CERL).

Currently the three barracks have been appropriated for administrative functions. Building 836 now serves as a classroom building. Building 835, completed in 1931, was converted for use by the 42nd Services Squadron. Building 678, completed in 1934, now houses the Airman Leadership School.

3.6.3.2 NCO housing areas

The NCO housing areas were developed from the late 1920s through the mid-1930s. Like the enlisted men's barracks, the housing was designed with Spanish Mission architectural styling which featured low, hipped roofs with red-clay tile and stucco exterior walls. The NCO quarters were built in two phases. The initial phase of construction was completed in 1928 and produced thirteen single-family residences (Buildings 638-649). These quarters were arranged on either side of the gentle arc of Hansell Street and are some of Maxwell's oldest buildings. These houses were square-shaped one-story bungalows featuring wood-framed screened porches which have since been enclosed (Figure 63).

Figure 63. Example of the 1928 NCO bungalows, 2012 (ERDC-CERL).

The second phase of NCO quarters' construction was completed from 1931–1934. During this phase, thirty-two two-story duplexes were built along the arced Adams Place (Buildings 635, 637, 650-665 and 669-676 including the associated garages), and in two housing groups south of East Shumacher Avenue (Buildings 715-736). The first twelve duplexes were completed by 1931 with the additional twenty completed by 1934. The NCO quarters were designed in the Spanish Mission style of architecture and featured the common elements of hipped, red clay tile roofs and stucco exterior walls. The duplexes were also ornamented with wrought

iron railings on the upper windows and by a wrought iron S on the front chimneys (Figure 64). The NCO housing areas were grouped along streets with sidewalks and shade trees, with one housing area arranged around an open common area with a playground (Figure 65).

Figure 64. The 1930s NCO duplexes along Third Street, 2012 (ERDC-CERL).

Figure 65. View of the inner courtyard of the NCO housing group south of East Shumacher Avenue, 2012 (ERDC-CERL).

3.6.3.3 Senior Officers Quarters housing area

The SOQs were built from 1932–1935 to house high-ranking officers who attended and taught at the ACTS. The SOQ area was designed as a neighborhood, unlike the traditional "Officers' Row" found at other Army posts of the time. The neighborhood was comprised of ninety-nine houses arranged on winding streets (Figure 66). This neighborhood's housing designs broke with the prevailing Spanish Mission style architecture style of the base since they were designed using French Provincial architectural details. The architectural elements predominantly used throughout these buildings were symmetrical façades with projecting wings, steeply pitched roofs, dormers, arched windows, corner quoins, and decorative iron balustrades at the windows. The SOQ homes featured three different porch types which varied in construction materials and size, although all were fairly small. One type was centrally located and featured a one-story portico with plain, square, wooden columns and capped with a decorative wrought-iron railing. The second type was simply a small enclosed entrance, and the third type was made of decorative wrought-iron. Although these design features were common to each SOQ, variety was provided through nine different house plans and three different porch types that were used in the area (Figure 67 and Figure 68).

Figure 66. Example of winding road and French Provincial style housing in the SOQ area, 2012 (ERDC-CERL).

Figure 67. Example of Type H house plan, one of nine used in the SOQ area, 2012 (ERDC-CERL).

Figure 68. Example of the Type Q house plan featuring a wrought-iron porch, 2012 (ERDC-CERL).

The Commanding General's home is located on a cul-de-sac in the SOQ area (Figure 69). The house was completed in 1934. The residence is also known as the Curry House after Major General John F. Curry, its first occupant and first commandant of the ACTS. Curry House is the only example of its house type at Maxwell, but its design still incorporates many architectural details common to the French Provincial style that unites the SOQ area. The house is larger, featuring five bedrooms, an attached two-car garage, and more elaborate landscaping. The house sits on a large lot enhanced by formal and picturesque landscaping. Adjacent to Curry House is a foot bridge that links the officers' quarters area with the golf course.

Figure 69. Commanding General's quarters, 2012 (ERDC-CERL).

3.6.3.4 Officers' community buildings

Along with the development and construction of the SOQ houses in the early 1930s was an associated area with officers' community buildings. The officers' community buildings also were built in the French Provincial architectural style to blend in with the rest of the housing area. This group of buildings was located northeast of the SOQs and included the Officers' Club, now called Maxwell Club (Building 144); Brett Hall for Bachelor Officers' Quarters (BOQ) (Building 119); two VOQs (Buildings 117 & 121);

and one garage (Building 122). The buildings were completed from 1934–1941.

The Officers' Club was completed in April 1934, but was enlarged soon after in 1936. The building features French Provincial styling, which features a high hipped roof and corner quoins. The building was oriented lengthwise north to south, but featured an angled portion on the north end and a large wing on the southern end that projected to the east (Figure 70). Behind the building on the east side was a swimming pool completed in 1934, and a bath house built in 1946. Subsequent additions to the Officer's Club have enlarged the building to the east while retaining the original architectural feel of the western façade and main entrance. The swimming pool and bath house have been removed, however, and the space has been converted to a grassy area lined with low-growing hedges in an English tea garden style (Figure 71).

Figure 70. View of the Officers' Club in 1946 (Maxwell AFB History Office).

Figure 71. The rear area of the Officers' Club where the pool and bath house used to be located with the eastern additions to the building shown in the background, 2012 (ERDC-CERL).

Brett Hall (Building 119) was completed in 1934. Serving as a BOQ, the building was designed to house eighteen bachelor officers and featured elements of the French Provincial architectural style. The building had a two-story central section with one-story projecting wings on each side. The roof was a high, hipped roof with multiple dormer windows along its length. Behind Brett Hall was a row of three garages that could accommodate up to nineteen cars. Currently Brett Hall serves as a VOQ (Figure 72).

Figure 72. Brett Hall's main entrance and east façade, 2012 (ERDC-CERL).

On the north and south sides of Brett Hall are two one-story VOQs that were built in 1941. These buildings were oriented lengthwise east to west and lacked many of the French Provincial architectural details (Figure 73).

Figure 73. VOQ (Building 121) south of Brett Hall, 2012 (ERDC-CERL).

3.6.3.5 WWII barracks

During the buildup to WWII, Maxwell Field was chosen as the location for the SEACTC. As a result, Maxwell became the largest preflight training school in the nation and to meet the demand for increasing residential space, many of the open areas within the original core of the base were filled with temporary barracks (Figure 74). These long, rectangular, one-story barracks were arranged in grids. Within the grids, barracks were oriented to the spaces they filled, with two barracks facing each other across a common lawn. Arranging the barracks in grids was in contrast to the arrangement of SOQ and NCO housing areas developed at the base throughout the late 1920s and 1930s.

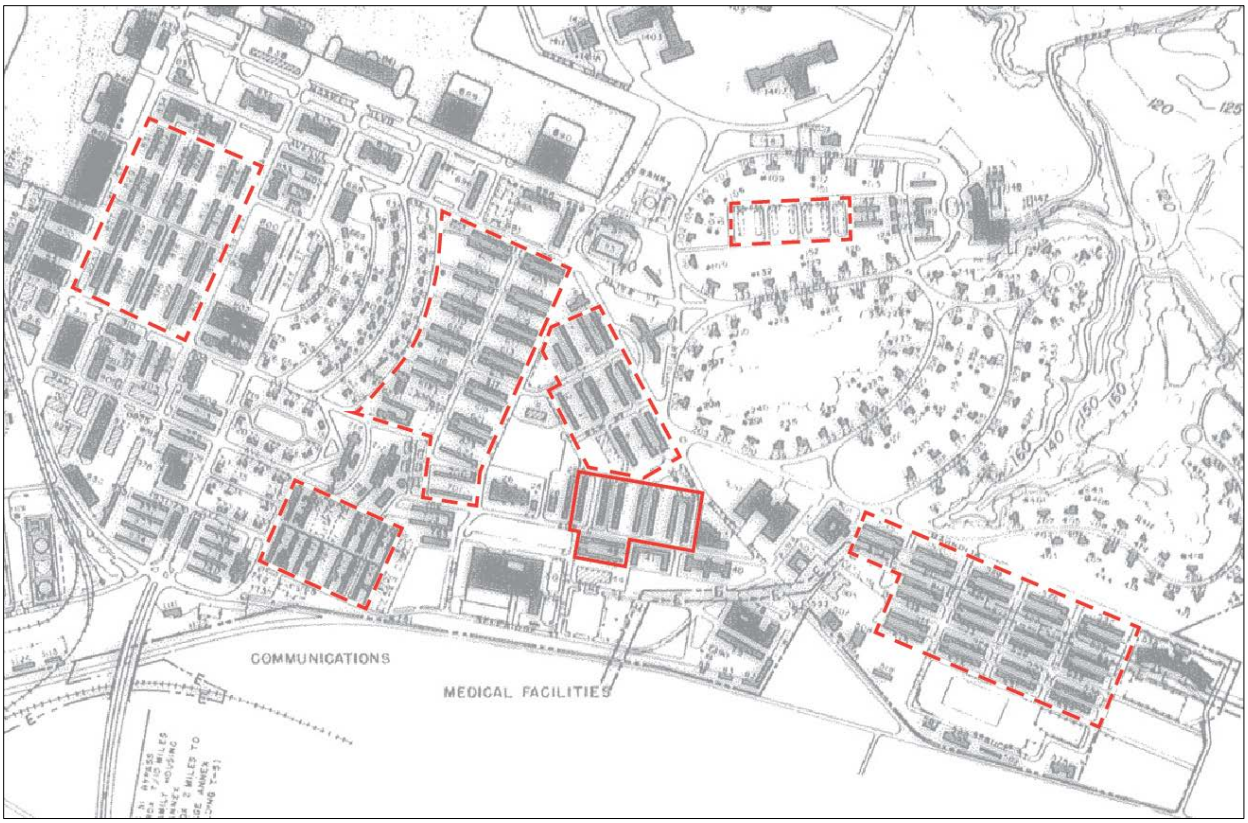


Figure 74. Major areas of WWII barracks clusters in 1957. Barracks in areas delineated with a dashed line have been demolished. The remaining cluster of WWII barracks is outlined with a solid red line (Maxwell AFB Cultural Resources).

Although the barracks were constructed quickly, they were well built and provided excellent insulation against the hot, humid Alabama summers. Like the other prewar construction at Maxwell, the WWII barracks featured hollow-core tile walls covered with stucco. The barracks were long, narrow side-gabled buildings with twelve rooms that were one room deep with full-length screened porches.

Currently, many of the WWII barracks have been demolished including many barracks that were surveyed in a 2001 National Register report. Of the barracks evaluated, eight barracks remain: Buildings 30-35 and Buildings 42-43 (Figure 75). The remaining WWII barracks in this area have been converted to multi-family residences while the area of demolished barracks has been turned into a park (Figure 76 and Figure 77). The land where the other WWII barracks were located has been redeveloped either as additional housing located east of the historic NCO

quarters (Figure 78), an administration area (Building 804), or left as open space (Figure 79).[52]

Figure 75. Boundary outlined in red of where some of the former WWII barracks were located. Currently, only eight barracks remain (area near bottom of photo), 2012 (ERDC-CERL).

[52] Eric C. Poplin and Bruce G. Harvey. *National Register of Historic Places Nominations Maxwell Air Force Base Montgomery County, Alabama.*. Atlanta, GA: Brockington and Associates, 2001.

Figure 76. WWII barracks converted to multi-family residences, 2012 (ERDC-CERL).

Figure 77. Park where WWII barracks have been demolished, 2012 (ERDC-CERL).

Figure 78. Current view of the contemporary housing east of the NCO bungalow area, 2012 (ERDC-CERL).

Figure 79. Former area of WWII barracks east of Building 500, 2012 (ERDC-CERL).

3.6.4 Fourth Aviation Squadron area

The Fourth Aviation Squadron area is in the northwestern section of Maxwell AFB. The area is located just south of where there is now a federal prison complex and near part of the west golf course. The area was developed for a segregated squadron during the buildup to WWII. The current area consists of a tight cluster of six buildings, all completed in 1942: four barracks (Buildings 1208-1211), a mess hall (Building 1214), and the administration building (Building 1215). The four barracks were laid out parallel to one another and oriented east to west so that their narrow gable ends faced the street (Figure 80). The mess hall and administration building were located east of the barracks and were oriented north to south so that their broad sides faced the barracks (Figure 80). The area was originally encircled by an external road with one main street running between the barracks and the mess hall and administration building. The road that originally connected the area with the rest of Maxwell Field was demolished during the construction of the west golf course.

Figure 80. Fourth Aviation Squadron building group with the proposed historic district boundary, 2012 (ERDC-CERL).

The current building group is only a part of what had been the complete Fourth Aviation Squadron area. The six buildings that are currently

standing were the original six buildings completed for the squadron, but seven other buildings were completed a year later to form the final area. The additional seven buildings included three more barracks, two recreation buildings, a movie theater, and a swimming pool. These buildings were demolished in the 1970s. A drawing showing the entire area built for the squadron is shown Figure 81.

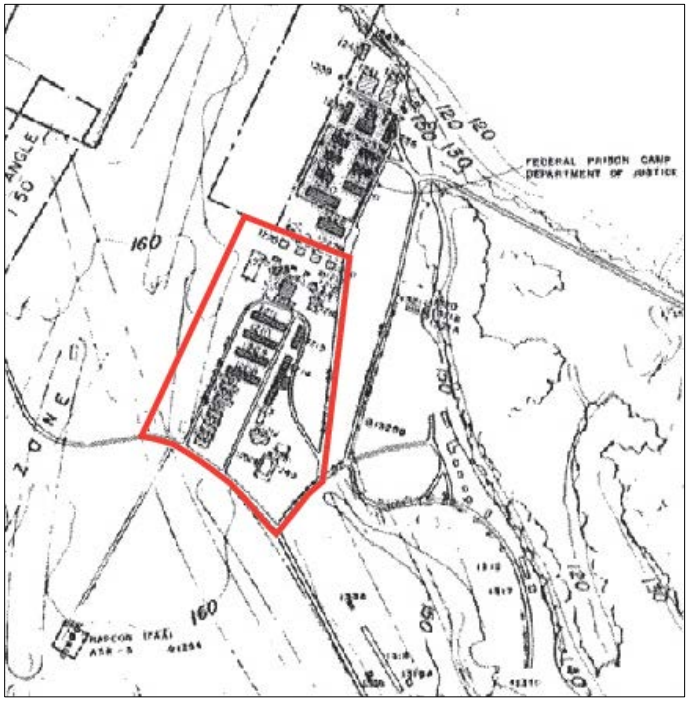


Figure 81. Outlined in red is the Fourth Aviation Squadron area in 1957. This drawing shows the original six buildings as well as the additional seven buildings that were demolished in the 1970s. The swimming pool was located in the southeast corner of the area. (Maxwell AFB Cultural Resources).

The four barracks are standard single-story rectangular barracks buildings from WWII with simple gable roofs. Each barracks had both side entrances as well as end entrances, and each building had hollow tile walls covered in stucco with asphalt shingles on the roofs. The barracks buildings have undergone some alterations that include replacing windows and removing and filling in doorways. The barracks current condition is shown in Figure 82.

Figure 82. Line of barracks in the Fourth Aviation Squadron area, 2012 (ERDC-CERL).

The design for the former mess hall was a narrow rectangular building with a gable roof and stucco exterior walls. Subsequent alterations have broadened the original narrow dormers into gabled dormers and have covered some exterior windows with stucco (Figure 83). The administration building was also a narrow rectangular building with a gable roof and stucco walls. There is no obvious main entrance although there are three modern doors along the west side (Figure 84).

Figure 83. Former mess hall in the Fourth Aviation Squadron area, 2012 (ERDC-CERL).

Figure 84. Former administration building in the Fourth Aviation Squadron area, 2012 (ERDC-CERL).

3.7 Vegetation

Vegetation is a characteristic of the landscape that has a relationship to land use patterns.[53] Differences in vegetation patterns can delineate boundaries, land use areas, and natural areas such as streams or ravines. In the military context, how vegetation is used can connote ceremonial, residential, training, or utilitarian areas. For example, residential neighborhoods are often the most heavily planted areas on military installations, while open spaces allow for gatherings or training. Additionally, prominent support buildings such as headquarters, chapels, hospitals, and officers' clubs tend to have more decorative landscaping than utilitarian buildings such as motor pools or quartermaster and warehouse areas.

General vegetation patterns around Maxwell AFB follow the land use patterns of the military context. Historically, vegetation was used to emphasize building entrances, line foundations, screen and block views, as well as for ornamentation. Many of Maxwell's streets are lined with trees, and the residential areas and important buildings are delineated by more ornamental plantings than other areas.

Images from the 1940s and 1950s show the widespread use of evergreen trees and shrubs as foundation plantings around the main buildings in the main core of the base. Examples of the landscaping used throughout Maxwell are shown in Figure 85–Figure 88.

[53] Loechl, et al., 2009, 83.

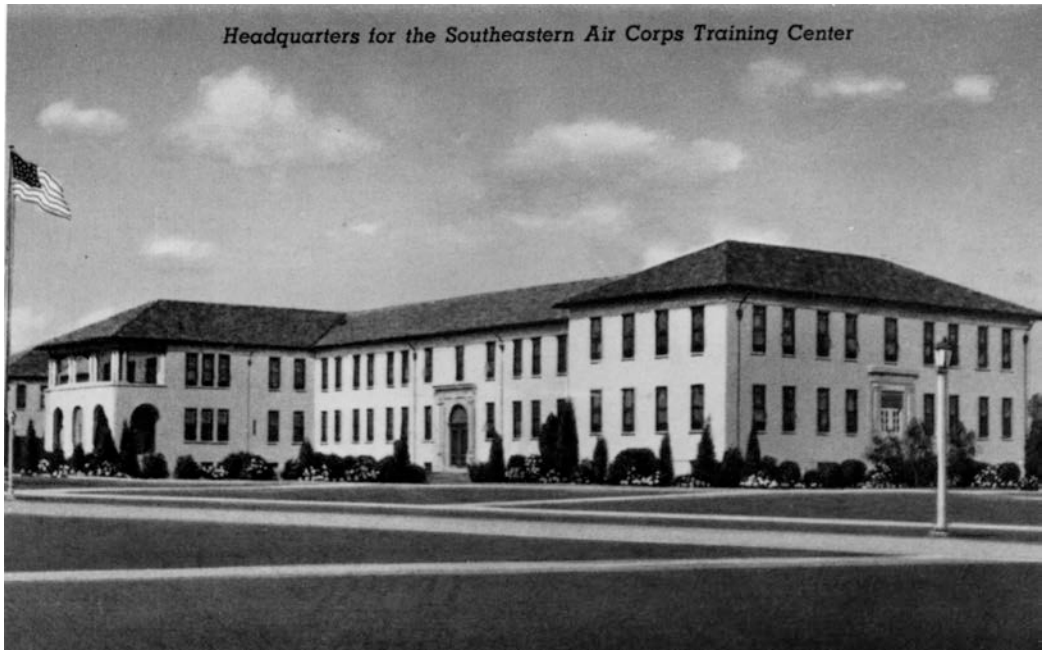


Figure 85. Postcard image of Austin Hall illustrating the extent of landscaping around the building, undated (Maxwell History Office).

Figure 86. Mature vegetation around Building 1, undated (Maxwell History Office).

Figure 87. NCO duplex in 1933 with the original vegetation plan (Maxwell AFB History Office).

Figure 88. View of the north flight line showing the lines of conifers used to screen Area 1400 from the runways, undated (Maxwell AFB History Office).

Historic planting plans from the early 1950s show extensive use of trees throughout the base. However, in keeping with military landscaping principles, the majority of trees were located in residential areas and around important administrative or operational buildings. For example, Figure 89 is a proposed plan for landscaping around the hospital complex. In executing this 1950 plan, several trees near the building would be removed along with hedges lining the entrance sidewalks, but large shade trees and many ornamental trees would be added in the spaces around the building.

Figure 89. Historic vegetation proposal for the hospital area. Large deciduous trees were planned around the grounds while shrubs and hedges line walkways and screen the parking area from the main building (Maxwell AFB Cultural Resources).

Figure 90 shows a plan from 1951 of proposed shade and ornamental trees to be planted around the historic core of Maxwell. The proposed trees were to fill in areas that were not already planted, resulting in a scattered pattern of planned trees.

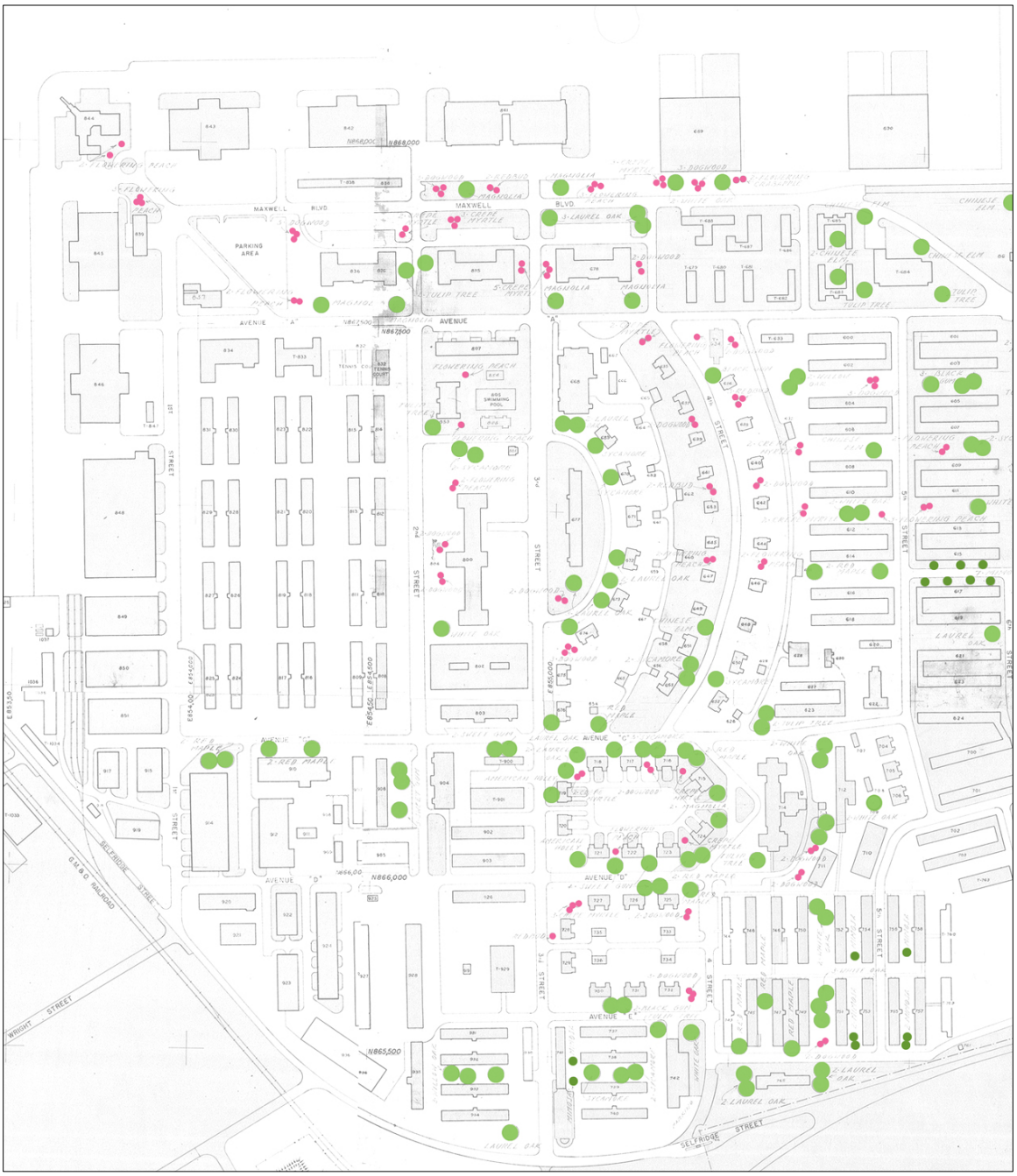


Figure 90. A 1951 map of proposed trees to be planted in the historic core of Maxwell AFB (Maxwell AFB Cultural Resources).

The circular layout and modern architecture of Area 1400 was complemented by an extensive landscape plan. Figure 91 is a vegetation plan from 1952 that shows the placement of shade trees, evergreens, and ornamental trees around the AU campus. The planting strategy followed the basic principles of planting from the main core of the base which incorporated more trees into residential areas and emphasized street trees. In Area 1400, however, the northern and western edges of the campus were screened from the runways by dense rows of evergreen trees. The interior of the campus circle was planted with shade and ornamental trees around the buildings and scattered trees in the open spaces. The overall landscape design complemented the park-like SOQ area and main core of the base.

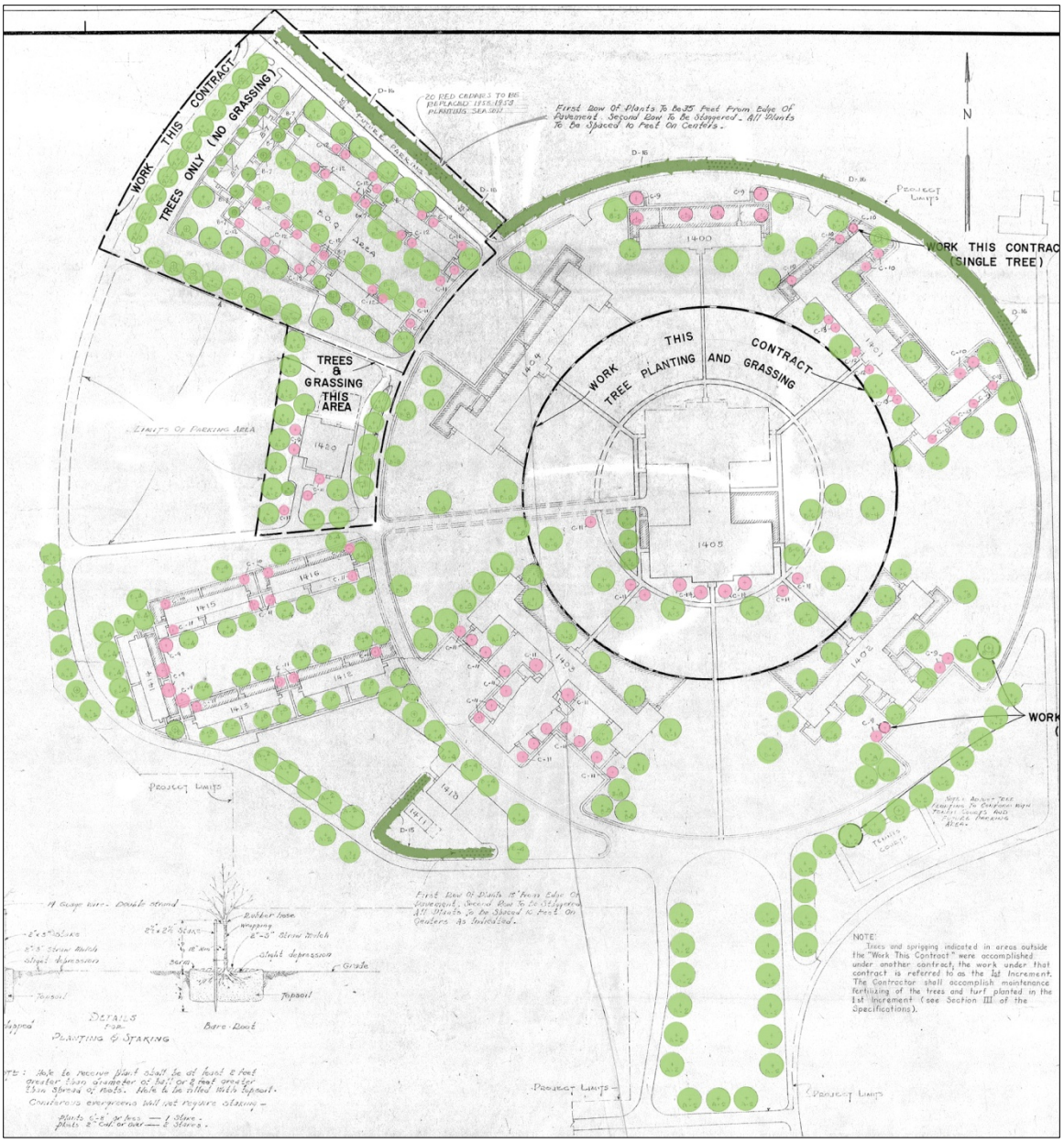


Figure 91. Area 1400 planting plan in 1952 (Maxwell AFB Cultural Resources).

Appendix A provides a plant list for Maxwell AFB compiled from historic planting plans of the base as well as a current list of trees approved for use.

The current vegetation at Maxwell AFB varies in condition throughout the base. While there are areas where the landscaping is well maintained the overall condition of the vegetation suggests the lack of an encompassing

base landscape plan. For example, Figure 92–Figure 94 are examples of differing conditions of hedges in the former enlisted men's barracks area.

Figure 92. Thick hedges line the foundation of Duncan Hall (Building 835), 2012 (ERDC-CERL).

Figure 93. Example of the foundation plantings of individual shrubs along Buildings 325 and 336, 2012 (ERDC-CERL).

Figure 94. Hedge that screens parking north of the Airman Leadership School (Building 679), 2012 (ERDC-CERL).

In the utilitarian and industrial areas, little ornamental vegetation was historically planted. The current vegetation patterns are minimal and planted irregularly. Much of the existing vegetation appears to be remnants of previous planting plans. Figure 95–Figure 98 show examples of the vegetation in the aviation support areas.

Figure 95. Individual shrub along the foundation of one of hangars along the west flight line, 2012 (ERDC-CERL).

Figure 96. Vegetation along the foundations of the hangars is not consistently planted, 2012 (ERDC-CERL).

Figure 97. Trees planted near a hangar (Building 843) along the north flight line, 2012 (ERDC-CERL).

Figure 98. Large evergreen planted close to a hangar on the west flight line, 2012 (ERDC-CERL).

Building 800 has long been an important headquarters and administrative building at Maxwell AFB. Historic images show extensive plantings of evergreen shrubs and trees around the foundation of this building (Figure 99). This level of planting is in contrast with the existing vegetation conditions (Figure 100-Figure 107).

Figure 99. Austin Hall (Building 800) in August 1946 showing extensive plantings around the foundation of the building (NARA 342-FH Box 2109 B47589).

Figure 100. Building 800 (formerly Austin Hall), showing vegetation conditions on the building's west side, 2012 (ERDC-CERL).

Figure 101. A slightly wider view of vegetation along the foundation on the same side of Building 800, 2012 (ERDC-CERL).

Figure 102. Shrubs line the sidewalks west of Building 800, 2012 (ERDC-CERL).

Figure 103. Foundation plantings along the south façade of the Airman Leadership School (Building 679), 2012 (ERDC-CERL).

Figure 104. Holly (*Ilex opaca*) hedges along a newer dormitory (Building 697) which is east of the historic barracks, 2012 (ERDC-CERL).

Figure 105. Example of a building entrance emphasized through ornamental planting, 2012 (ERDC-CERL).

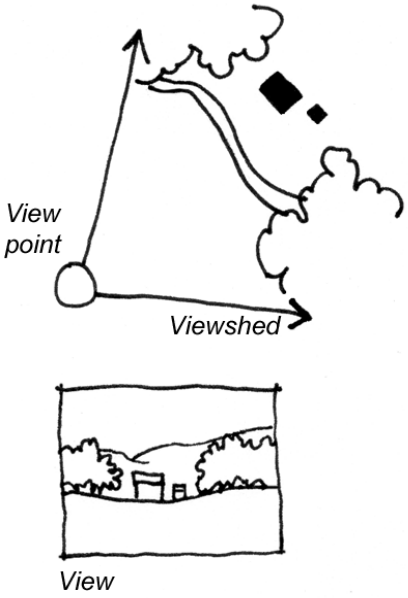
Figure 106. Example showing that few parking lots at Maxwell AFB have shade trees, 2012 (ERDC-CERL).

Figure 107. Sycamore trees line the street in the NCO housing area, and hedges screen the housing from Maxwell Boulevard, 2012 (ERDC-CERL).

3.8 Views and viewsheds

Views played a vital role in the site selection, programmatic organization, and character of Maxwell AFB. This section inventories the views and viewsheds of Maxwell AFB by documenting the features and elements that contribute and define them. These components are then analyzed to determine their condition and historic integrity. Cultural landscapes are a relatively new field of inquiry and as a consequence, the idea of documenting and preserving historically planned views and viewsheds is also a new idea in landscape studies. Views and viewsheds are intentionally designed features in a landscape. Although they are intangible, physical encroachment on them significantly alters the aesthetics of the design.

Views and viewsheds are created by landscape-scale physical elements. In the process of identifying and evaluating historic views and viewsheds, the historic physical elements are compared with the contemporary site context.



Viewshed refers to all visible elements that can be seen from a certain viewpoint. Viewsheds are both external and internal. External viewsheds are those with views from viewpoints outside Maxwell AFB, while internal viewsheds are viewpoints from within base grounds.

View is the scene or vista that can be seen when looking in one direction standing at a certain viewpoint.

Viewpoint is the exact point where a person is standing when looking at a view.

Because Maxwell AFB underwent several design iterations, the base lacks any comprehensively designed views or viewsheds. However, there are a few significant views that result from the retention of the 1930s base planning and redesign efforts. The primary remaining view corridor is along Mitchell Street, which was once the street leading from the main gate (Figure 108).

Figure 108. View north along Mitchell Street toward the north flight line hangars. Trees line this portion of the street which emphasizes this view corridor, 2012 (ERDC-CERL).

Another view corridor in the historic core is along Arnold Street. This view highlights the uniformity of the hangar design and layout. Although the original 1930s view along this street would have featured the large open recreational field on the east, with an unobstructed view to Austin Hall, it is currently blocked by a grassed berm that separates Building 804 from the street (Figure 109).

Figure 109. View north along Arnold Street, 2012 (ERDC-CERL).

The SOQ area was designed to have a park-like setting. The area featured curved and winding streets lined with street trees. As a result, this area lacks any direct sight-line views, but features many picturesque views of the housing interspersed by the trees and open spaces. Although there are no viewpoints, viewsheds, or views in this area, the overall character of the area provides a tranquil scene that was intended to be visually pleasing (Figure 110).

Figure 110. Views within the SOQ were meant to be encompassing, without any specific point from which to view the scene, 2012 (ERDC-CERL).

3.9 Small-scale features

Small-scale features can range in size and also be either stationary or moveable objects. Small-scale features often contribute to the historic character of the installation.[54] These features may include monuments, light poles, benches, flagpoles, fencing, or signs which can be either functional or purely decorative. Some small-scale features are pragmatic and are arranged through the site according to their use; benches, signs, and trashcans are placed where people need them while fences, lighting, and hardscape material choices subtly inform the larger landscape.

[54] Loechl et al. 2009, 90.

Throughout Maxwell AFB, road and sidewalk paving is predominantly concrete or asphalt. However, in areas that are ceremonial or commemorative, the surface paving choices are more elaborate to convey the significance of the area. Figure 111–Figure 116 illustrates different paving types used throughout the base. The concrete aprons on the north flight line have been converted to parking lots, but still retain small-scale historic features reflective of their former use (Figure 117).

Figure 111. Concrete pavers are used in the landscaped area east of the Officers' Club, 2012 (ERDC-CERL).

Figure 112. Brickwork defines the area commemorating the Air Corps Tactical School west of Building 800, 2012 (ERDC-CERL).

Figure 113. Three paving types are combined to form the base of the commemorative statue of Lt. Karl W. Richter, 2012 (ERDC-CERL).

Figure 114. A concrete walk circles the octagonal paving pattern for the helicopter display area, 2012 (ERDC-CERL).

Figure 115. Bricks for walkway in the memorial area south of Chennault Circle, 2012 (ERDC-CERL).

Figure 116. Terrazzo-like paving in Area 1400, 2012 (ERDC-CERL).

Figure 117. Airplane tiedown embedded into the former apron on the north flight line. The area has been converted to a parking lot, 2012 (ERDC-CERL).

Figure 118–Figure 123 show several types of trash collection points and various ways dumpsters and recycling bins are screened from view at Maxwell AFB. Near the hangars and aviation support facilities, the fence styling of the trash areas reflects the architectural design of the hangars. In other areas of the base, the trash collection points are screened with other types of fencing or are left exposed.

Figure 118. Dumpsters screened with brick posts and wooden fencing near barracks, 2012 (ERDC-CERL).

Figure 119. Trash collection point on a former apron with posts that reflect the architecture of the hangars, 2012 (ERDC-CERL).

Figure 120. Trash collection point screened from view by wooden fencing and concrete posts near the flight lines, 2012 (ERDC-CERL).

Figure 121. Wooden fencing screening trash collection point near the Maxwell Club, 2012 (ERDC-CERL).

Figure 122. Unscreened recycling bins, 2012 (ERDC-CERL).

Figure 123. Unscreened dumpsters near the hangars, 2012 (ERDC-CERL).

Lighting throughout the base varies from examples of decorative lighting in the housing areas and historic administration areas to examples of utilitarian lighting choices in the industrial areas. Figure 124–Figure 129 illustrate different lighting types throughout Maxwell AFB.

Figure 124. Detail of a decorative type of light used near Building 800, 2012 (ERDC-CERL).

Figure 125. Detail of a second type of decorative light in the NCO housing area, 2012 (ERDC-CERL).

Figure 126. Decorative light that lines the streets in the NCO housing area, 2012 (ERDC-CERL).

Figure 127. Lighting used to illuminate display aircraft, 2012 (ERDC-CERL).

Figure 128. Lighting type used to line walkways in Area 1400, 2012 (ERDC-CERL).

Figure 129. Lighting near the NCO housing area, 2012 (ERDC-CERL).

Small structures serve many uses throughout the landscape. At Maxwell, bus shelters and smoking areas are located to efficiently accommodate users (Figure 130, Figure 131, and Figure 132).

Figure 130. Bus-stop shelter near the Base Operations building and former Passenger Terminal, 2012 (ERDC-CERL).

Figure 131. Bus-stop shelter near the west line of hangars, 2012 (ERDC-CERL).

Figure 132. Bus-stop shelter, across Maxwell Boulevard from the Youth Activities building (Building 1), 2012 (ERDC-CERL).

Other small-scale landscape features include signs, trashcans, seating, and other infrastructural elements like transformers, utility poles, and antennas. Figure 133–Figure 153 show examples of these features from around the base.

Figure 133. Decorative sign for the Maxwell Club (officers' club), 2012 (ERDC-CERL).

Figure 134. Building signage in front of Building 800, 2012 (ERDC-CERL).

Figure 135. Sign for Chapel 2 southeast of Area 1400, 2012 (ERDC-CERL).

Figure 136. Parking sign near the Base Operations building, 2012 (ERDC-CERL).

Figure 137. Informational sign, 2012 (ERDC-CERL).

Figure 138. Theater sign, 2012 (ERDC-CERL).

Figure 139. Concrete table with benches, 2012 (ERDC-CERL).

Figure 140. Concrete table and bench, 2012 (ERDC-CERL).

Figure 141. Concrete benches east of the Maxwell Club, 2012 (ERDC-CERL).

Figure 142. Decorative concrete fountain east of the Maxwell Club, 2012 (ERDC-CERL).

Figure 143. Bike rack and picnic table near the athletic complex in adaptively reused hangars on the north flight line, 2012 (ERDC-CERL).

Figure 144. Bike rack in Area 1400, 2012 (ERDC-CERL).

Figure 145. Wooden bench and trashcans in Area 1400, 2012 (ERDC-CERL).

Figure 146. Bench and planters in Area 1400, 2012 (ERDC-CERL).

Figure 147. Trashcan planter in Area 1400, 2012 (ERDC-CERL).

Figure 148. Trashcan in Area 1400, 2012 (ERDC-CERL).

Figure 149. Transformer and HVAC system behind the former hospital, 2012 (ERDC-CERL).

Figure 150. Transformer in Area 1400, 2012 (ERDC-CERL).

Figure 151. Satellite dish near the hangars, 2012 (ERDC-CERL).

Figure 152. Antenna in the hangars and warehouse area, 2012 (ERDC-CERL).

Figure 153. Utility poles lining Arnold Street looking north, 2012 (ERDC-CERL).

3.9.1 Monuments, markers, and ceremonial features

Maxwell AFB has many monuments, markers, and ceremonial features. These areas typically feature an explanatory plaque, statue, or object as well as ornamental landscaping to delineate these spaces from the surrounding context of the base. Southeast of the Base Operations building is a historical marker and across the street is another marker commemorating the site of the Wright brothers' 1910 flying school hangar (Figure 154 and Figure 155).

Figure 154. Marker defining the location of the Wright brothers' flying school, 2012 (ERDC-CERL).

Figure 155. Alabama historical marker documenting Major General Claire L. Chennault's achievements in the Air Corps Tactical School. This marker is located east of the Base Operations building, 2012 (ERDC-CERL).

Located west of Building 800, in front of the main entrance, is a propeller and wing mounted on a granite monument commemorating the pilots who trained at the Air Corps Tactical School. The monument faces the street and is encircled by brick benches (Figure 156). A descriptive plaque describing the school is mounted on a low brick pedestal (Figure 157). Another plaque on the base of the monument describes the significance of the prop and wings symbols to military aviation (Figure 158).

Figure 156. The Prop & Wings marker commemorating the Air Corps Tactical School is located west of Building 800, 2012 (ERDC-CERL).

Figure 157. The Air Corps Tactical School commemorative plaque located west of Building 800 near the Prop & Wings monument, 2012 (ERDC-CERL).

Figure 158. The plaque at the base of the Prop & Wings monument, 2012 (ERDC-CERL).

Southwest of the former hospital, now the Civil Air Patrol National Headquarters, is a monument to the Civil Air Patrol members who died during duty. The monument consists of a Civil Air Patrol-marked plane situated in a circular area filled with red lava rocks and featuring a granite descriptive marker (Figure 159 and Figure 160).

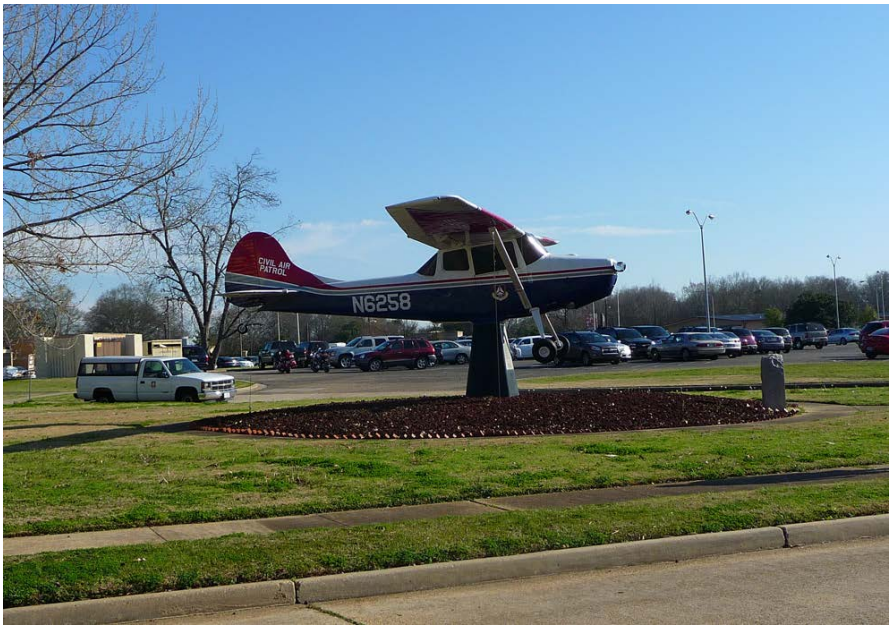


Figure 159. Civil Air Patrol monument, consisting of a Civil Air Patrol plane and granite marker, 2012 (ERDC-CERL).

Figure 160. Civil Air Patrol memorial marker, 2012 (ERDC-CERL).

South of Chennault Circle is Air Park, which is a space used to display monuments and historic aircraft. Aircraft on display in Air Park include an RF-101 *Voodoo*, the F-4D *Phantom*, F-105D *Thunderchief*, the F-100D *Super Sabre*, the F-86A *Sabre*, a B-25J *Mitchell*, a T-38 *Talon*, and the B-52D *Stratofortress* (Figure 161 and Figure 162). Descriptions are presented in front of each aircraft on plaques raised on concrete pedestals (Figure 163). The historic aircraft are arranged around the Richter statue (Figure 164). 1st Lieutenant Karl Richter was the youngest USAF pilot to shoot down a North Vietnamese MiG and went on to fly over 200 successful missions during the Vietnam War. A replica of the Wright brothers' biplane that they flew while training in Montgomery in 1910 (Figure 165) is displayed across Chennault Circle in a rectangular area lined on three sides with flags (Figure 166).[55]

Figure 161. A Republic F-105 *Thunderchief* on display around the Richter statue, 2012 (ERDC-CERL).

[55] Van Buren and Cook. *Historic Maxwell Air Force Base: Driving Tour Booklet*, 38.

Figure 162. A Northrop T-38 *Talon* on display, 2012 (ERDC-CERL).

Figure 163. Detail of one of the historic aircraft explanatory plaques, 2012 (ERDC-CERL).

Figure 164. Statue commemorating 1st Lieutenant Karl Richter, 2012. This statue is located in Air Park with the historic airplanes arrayed around it (ERDC-CERL).

Figure 165. A replica of the Wright brothers' airplane on display in the southern portion of Air Park with an explanatory plaque, 2012 (ERDC-CERL).

Figure 166. Flags line the north, east, and west sides of Air Park, 2012 (ERDC-CERL).

At the south end of Air Park, a B-25J *Mitchell* is on display. The area includes several monuments, markers, and memorials (Figure 167 and Figure 168). There is also an Alabama state historical marker describing the history of AU (Figure 169) as well as a memorial to William R. Lawley Jr., a retired USAF Colonel and recipient of the Medal of Honor (Figure 170).

Figure 167. B-25J *Mitchell* on display at the southern end of Air Park, 2012 (ERDC-CERL).

Figure 168. B-25J *Mitchell* on display with explanatory plaque, 2012 (ERDC-CERL).

Figure 169. Alabama state historical marker located in Air Park that describes the significance of Air University, 2012 (ERDC-CERL).

Figure 170. Memorial to William R. Lawley Jr. located in Air Park, 2012 (ERDC-CERL).

There are several other memorials and markers in Area 1400. Along the inner circle near Fairchild Library are the Southeast Asia Service and Southwest Asia Service markers (Figure 171 and Figure 172). Trees in this area have been dedicated to individuals, and markers are displayed at the bases of these trees (Figure 173). Other markers are found throughout Maxwell AFB, like the dedication plaque on Building 678 (Figure 174).

Figure 171. Southeast Asia Service memorial in Area 1400 is located along the inner circle southwest of Fairchild Library, 2012 (ERDC-CERL).

Figure 172. Southwest Asia Service marker, dedicated to the men and women who served in Desert Shield and Desert Storm, 2012 (ERDC-CERL).

Figure 173. Example of a marker at the base of a tree in Area 1400, 2012 (ERDC-CERL).

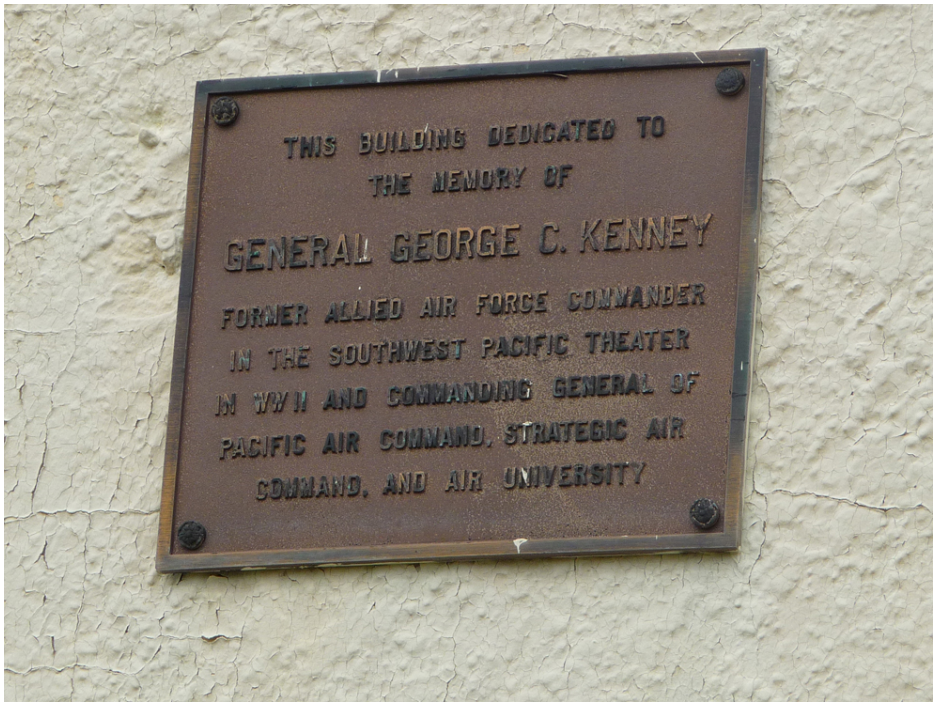


Figure 174. Dedication plaque on Building 678, 2012 (ERDC-CERL).

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4 Criteria for Evaluating Historic Landscapes

Identification of historically significant properties is achieved through evaluation of their position within a larger historic context. According to the NRHP, historic contexts are defined as "...the patterns, themes, or trends in history by which a specific occurrence, property, or site is understood and its meaning (and ultimately its significance) within prehistory or history is made clear.[56] A historic property is determined to be either significant or not significant by applying standardized National Register Criteria for Evaluation to property within its historical context. The NRHP categorizes significant properties as buildings, sites, districts, structures, or objects.[57]

4.1 Criteria for evaluation

The National Register Criteria for Evaluation define how historic properties are significant by categorizing a property's associations with important historic qualifiers. The *National Register Bulletin #15: How to Apply the National Register Criteria for Evaluation* lists four major criteria to which a historic property can be associated: Criterion A-important events, Criterion B-persons, Criterion C-importance in design and construction, and Criterion D-information potential. Although there are other criteria considerations, the four major criteria are described in more detail below.

A. Event—is associated with events that have made a significant contribution to the broad patterns of our history; or

B. Person—associated with the lives of persons significant in our past; or

C. Design/Construction—embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or

D. Information Potential—yielded, or is likely to yield, information important in prehistory or history.

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[56] NPS. *National Park Service Bulletin #15: How to Apply the National Register Criteria for Evaluation*. (Washington, DC: US Department of the Interior, 1991), 7.

[57] Ibid., 9.

4.2 Aspects of historic integrity

In addition to possessing historical significance, to be eligible to the NRHP properties must also retain sufficient physical integrity of features in order to convey its significance.[58] Historic properties both retain their integrity and convey their significance, or they do not. The National Register recognizes seven aspects or qualities of a property that define the concept of integrity. To retain historic integrity, a property must possess several, and usually most, of the seven aspects. The retention of specific aspects of historic integrity is paramount for a property to convey its significance. Determining which of these aspects are most important to a particular property requires knowing why, where, and when the property is significant. The seven aspects of integrity are listed in *National Register Bulletin #15: How to Apply the National Register Criteria for Evaluation*, as reproduced below.

> ***Location***
>
> Location is the place where the historic property was constructed or the place where the historic event occurred.
>
> ***Design***
>
> Design is the combination of elements that create the form, plan, space, structure, and style of a property. It results from conscious decisions made during the original conception and planning of a property (or its significant alteration) and applies to activities as diverse as community planning, engineering, architecture, and landscape architecture. Design includes such elements as organization of space, proportion, scale, technology, ornamentation, and materials.
>
> ***Setting***
>
> Setting is the physical environment of a historic property. Setting refers to the character of the place in which the property played its historical role. It involves how, not just where, the property is situated and its relationship to surrounding features and open space.
>
> ***Materials***
>
> Materials are the physical elements that were combined or deposited during a particular period of time and in a particular pattern or configuration to form an historic property.
>
> ***Workmanship***
>
> Workmanship is the physical evidence of the crafts of a particular culture or people during any given period in history or prehistory.
>
> ***Feeling***

[58] NPS, *National Register Bulletin #15*, 44.

Feeling is a property's expression of the aesthetic or historic sense of a particular time period.

Association

Association is the direct link between an important historic event or person and a historic property.

Properties in a historic district are classified as either "contributing or non-contributing" resources. Contributing resources date from the historic period of significance established for the district. They contribute to the significance and character of the district through their historical associations and/or architectural values. Non-contributing resources are those that, due to the date of construction, alterations, or other factors, do not contribute to the district's historic significance or character.

4.3 Reports and nominations

There have been many cultural resources studies at Maxwell AFB since the early 1960s. Many of the studies focus on archaeological resources including an initial archaeological study of the base conducted in 1964, one in 1988, and another in 1995. The architectural investigations by various consultants are summarized below.

In 1987 a National Register nomination documented Austin Hall (Building 800), Simler Hall (Building 836), and the SOQ area; the work determined they all were nationally significant and eligible for the National Register.[59] The Alabama SHPO concurred with the determinations (see Appendix B of 24 June 1987 letter).

- Austin Hall (Building 800) was determined significant under Criterion A for its associations with the ACTS and for development and training of the officers who developed the strategy employed by the U.S. Army Air Forces in the European and Pacific Theatres during World War II. It was also found significant under Criterion C as an extremely well-preserved example of the architectural style adopted as part of the 1926 Army Air Corps Five-Year Expansion Plan.

[59] Neil D. Robison, National Register of Historic Places Inventory–Nomination Form: NRHP Forms for Building 800; Building 836; and Maxwell Air Force Base Senior Officers' Quarters Historic District, 1987.

- Building 836 was determined significant under Criterion C as an example of an enlisted man's barracks built under the 1926 Army Air Corps Five-Year Expansion Program. The two-story barracks type is unique to Army airfields, as three-story barracks are typical at other Army installations. Building 836 is also eligible under Criterion A as the first permanent structure built at Maxwell. It is significant for its associations with the early history of the base and with the ACTS.

- The SOQs were determined significant as a well-preserved example of an officer's quarters complex built under the 1927 Army Air Corp Five-Year Expansion Program and reflect the concept of the park-like setting, curving streets, and appropriate regional design espoused by Frederick Law Olmsted, Jr. and George B. Ford, who were influential in the designing of the 1926 Army housing program. These quarters are also significant under Criterion A because the officers' quarters complex served initially as housing for the instructors of the ACTS and the senior-grade officers attending the school. The housing is significant for its associations with the group of men who developed the strategy employed by the US Army Air Forces in the European and Pacific Theatres during World War II. Subsequently, the buildings have served as the homes of personnel intimately associated with the development of US military air power.

In 1992, a Cultural Resources Plan (CRP) was prepared for Headquarters AU at Maxwell AFB by EDAW, Inc. This CRP was written to be a specialized component of the Base Comprehensive Plan. To comply with Air Force Regulation (AFR) 126-7, all resources eligible for the NRHP were identified, and then the Base Comprehensive Plans were assessed for the effects on eligible resources. Mitigation methods were developed to avoid or reduce potential adverse effects on eligible historic or archaeological resources. The CRP made recommendations to group historical buildings that were closely related in historic function, physical location, and architectural style into district nominations, and it also made proposals for expanding the existing SOQ district to include the 18-hole golf course and open land adjacent to the quarters as well as the officers' community facilities including Brett Hall (Building 119) and the Officers' Club (Building 144). The suggested changes also included renaming the area as the Historic Suburb. The CRP also proposed creating a new historic

district called the Historic Core which would consist of the buildings constructed to accommodate the needs of the ACTS in the late 1920s through the early 1940s.[60]

In 1996 several historic resource surveys were conducted at Maxwell AFB and Gunter Annex by Brockington and Associates, Inc. The firm first conducted an archaeological resource survey to examine portions of Maxwell AFB, Gunter Annex, Maxwell Heights Housing Area, Lake Martin Recreation Area, and the Lake Jordan/Vigilant Warrior Training Area that had not previously been investigated. This survey completed the inventory of potential archaeological resources within Maxwell AFB and its associated lands in Alabama. Also at this time, investigators conducted a Cold War era architectural resources survey at Maxwell AFB and Gunter Annex. This evaluation focused on Chennault Circle and the components of the AU at Maxwell AFB and Building 857 (the Blockhouse) at Gunter Annex. The report authors found no evidence of associations with significant events or developments of this era for these particular facilities or any others at Maxwell AFB or Gunter Annex. They recommended these resources as not eligible for the NRHP.[61]

As part of that same work, Brockington conducted a historic architectural survey of Maxwell AFB and Gunter Annex that involved completing abbreviated Alabama historic site forms for every building constructed prior to and including 1950. The survey was undertaken as a basis for a Building Maintenance Plan. The survey included 198 properties on Maxwell AFB and 89 properties on Gunter Annex. The conclusion of the survey recommended that a Multiple Resources District be created which would include a total of 108 buildings and structures on Maxwell AFB. A draft of the Building Maintenance Plan was submitted to the Corps of Engineers in December 1996, and the final version was submitted in 1999.[62]

In March 1999, Brockington completed a Cultural Resources Management Plan (CRMP) for Maxwell AFB. The CRMP outlined the cultural resources studies completed at Maxwell AFB, the procedures for managing the identified historic properties, and the procedures for managing any

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[60] EDAW, Inc. *Cultural Resources Plan*, 1992, 1-1, 2-1, 2-2.

[61] Brockington and Associates, Inc. *National Register of Historic Places Nominations Maxwell Air Force Base Montgomery County, Alabama* (Atlanta, GA: Brockington and Associates, Inc., 2001), 4.

[62] Ibid.

historic properties found in the future. The CRMP was written so that it would be integrated with the overall comprehensive plan for the Base.[63]

In 2001, Brockington and Associates, Inc. under contract with the Mobile District US Army Corps of Engineers, prepared a report that included NRHP surveys in what they classified as a Multiple Resource Area (MRA) located at Maxwell AFB. The completion of the survey provided partial compliance with Section 110 of the NHPA of 1966. The proposed MRA tried to cohesively address all of the historic resources at Maxwell AFB. The MRA survey included a Multiple Property Documentation Form and individual nomination forms for a NCO Historic District, the Flight Line Historic District, the World War II Barracks Historic District, and the Fourth Aviation Squadron Historic District, Building 678, Building 835, archaeological site 1MT200, and an extension to the SOQ Historic District. The MRA also included the following previously listed properties: the SOQ Historic District, Building 800, and Building 836.[64] However, the survey was not officially approved by the Air Force and the National Register forms that were completed were not sent to the Alabama SHPO. As a result, these proposed historic districts are not recognized by Maxwell AFB, but Maxwell AFB has been consulting on these buildings individually.[65]

In 2002, Geo-Marine, Inc. re-evaluated the AU for Cold War significance. This report determined that the architectural modifications, specifically the addition of brick veneer in the 1980s, have not erased the primary features of the buildings and therefore, the academic buildings retain the basic elements of their International-style architecture and the academic design layout. Furthermore, the changes occurred during the district's period of significance. It was recommended that the historic Chennault Circle development was eligible as a Historic District for its important role in the Air Force's Cold War history because buildings in this area served as the primary education facilities for high-ranking Air Force officers and as a center for the development of Air Force doctrine and strategy.[66] Even though the War Gaming Center (Building 1406) was not built as part of the

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[63] Maxwell Air Force Base Integrated Cultural Resources Management Plan Volume I. United States Air Force Air Education and Training Command. May 2011.

[64] Brockington and Associates, Inc., *National Register of Historic Places Nomination*, 2001), 4.

[65] Eric C. Poplin and Bruce G. Harvey, National Register of Historic Places Nominations Maxwell Air Force Base Montgomery County, Alabama (Atlanta, GA: Brockington and Associates, Inc. 2001).

[66] Edward Salo and Marsha Prior. *Maxwell Air Force Base and Gunter Annex: Cold War-Era Buildings and Structures Inventory and Assessment* (Plano, Texas: Geo-Marine, Inc., 2002), 49.

initial complex, the building's architecture blends and does not seriously alter the campus feel of the other buildings in Chennault Circle. This war-fighting facility supported the academic and Cold War missions of the Chennault Circle Historic District. Thus, seven Cold War-Era properties at Maxwell AFB (Buildings 1400–1406) were determined eligible for listing in the NRHP under Criterion G for their association with the Cold War, and eligible as a historic district under Criterion A for their association with Air Force education and the creation of airpower doctrine during the Cold War. The Chennault Circle Historic District is also eligible under Criterion C as an example of a hardened command post.[67]

Because Maxwell has many areas that have been surveyed at different times, Figure 175 maps the proposed and established historic district boundaries and when each was surveyed.

[67] Ibid., 59.

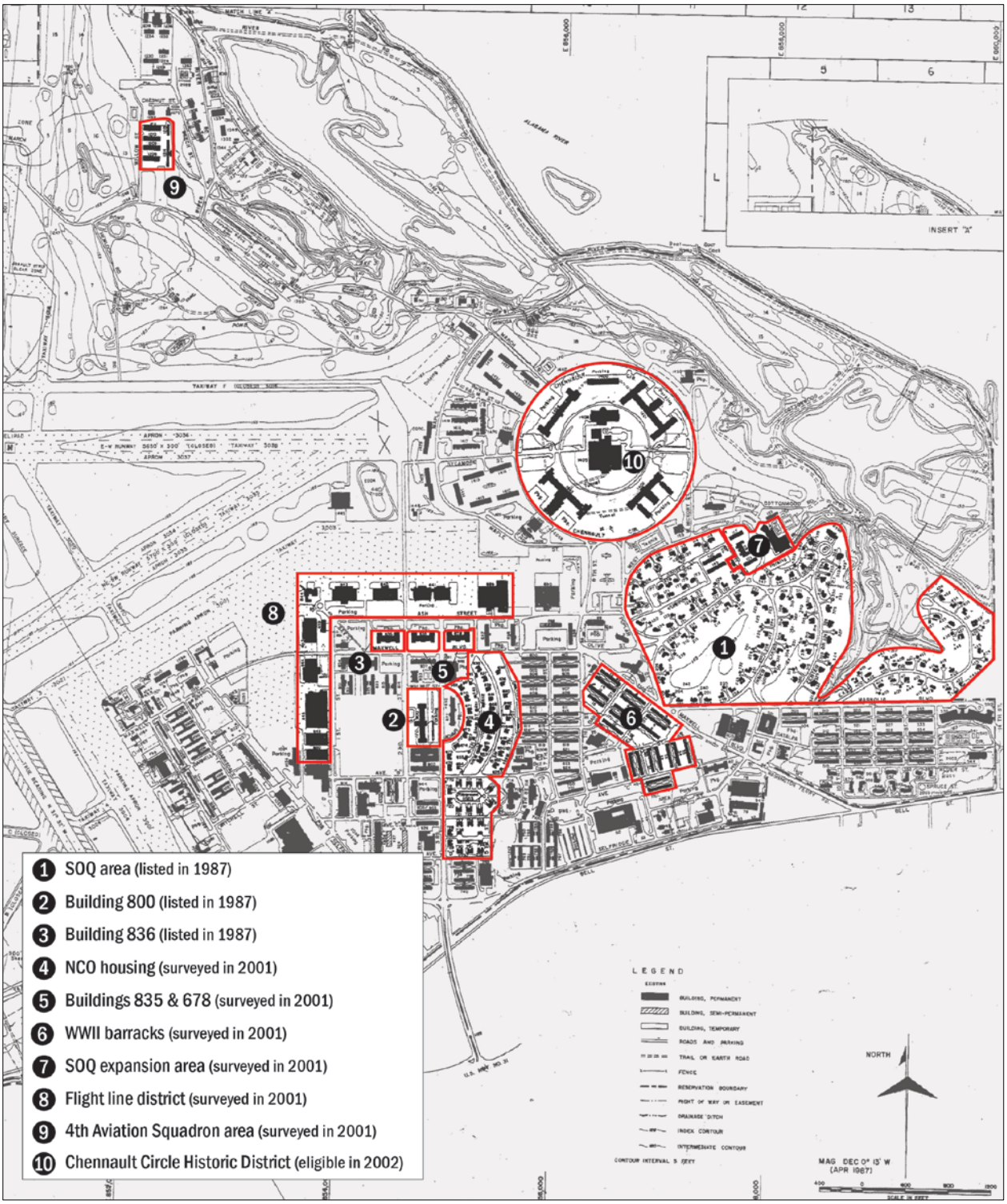

Figure 175. The many proposed and established historic district boundaries as described in the 1987 National Register nomination as well as the surveyed areas outlined in the 2001 and 2002 reports for Maxwell AFB, 2012 (ERDC-CERL).

4.4 Final determinations of eligibility

4.4.1 Historic significance

The identification of historically significant properties can be achieved only through evaluation of their position within the larger historic context. According to the NRHP, historic contexts are defined as "...the patterns, themes, or trends in history by which a specific occurrence, property, or site is understood and its meaning (and ultimately its significance) within prehistory or history is made clear."[68]

4.4.1.1 Finding for Criterion A — Event or Broad Pattern in History

The landscape at Maxwell AFB is significant for its role in the history of American aviation from the Wright brothers' flying school, to establishment of the ACTS, to today's mission in the Air Education and Training Command.

4.4.1.2 Finding for Criterion B — Person

There is no person significantly responsible for the layout and design of the landscape at Maxwell AFB.

4.4.1.3 Finding for Criterion C — Design/Construction/Planning

The landscape at Maxwell AFB is significant as a design of an interwar-era installation using Quartermaster Corps planning principles. The SOQs were designed by architects of the Army Quartermaster Corps and carefully laid out in a neighborhood setting with winding streets, sidewalks, shade trees, and open grassy areas. Army Housing Program standardized plans were used for these quarters, and the architects chose to use the French Provincial style (one of five styles available), based on the French influences in the region. In addition, the Chennault Circle Historic District was previously proposed eligible under Criterion C as an example of the hardened command and control complexes that the US military constructed across the nation in response to the Soviet nuclear threat of the Cold War era.

[68] NPS, *National Register Bulleting #15*, 3

4.4.1.4 Finding for Criterion D — History

While Maxwell AFB is a significant historical site for the Air Force, the military, and the United States, this project provided no determination that the designed landscape has yielded, or would be likely to yield, any information important in prehistory or history.

4.4.2 Integrity

There are several listed, eligible, and proposed historic districts at Maxwell AFB, and each involves different periods of significance, architectural styles, and missions. The integrity of the landscape in each of these districts will be discussed below in terms of layout, land use, circulation, built environment, expressions of military culture, vegetation, small-scale features, and views and viewsheds.

4.4.2.1 Maxwell Field Historic District

The landscape in the operations core is an amalgam of the original 1930s layout, the physical expansion leading up to and during WWII, and the subsequent changes throughout the latter half of the twentieth century. The result is that many of the original landscape features found in the 1930s plan are still evident, but have been modified. For example, the basic road layout from the 1930s cantonment continues to provide the organizing structure to the historic core. However, changes to several of the main roads of the 1930s plan have rendered a new hierarchy to the road network to incorporate roads that connected the subsequent additions to the base.

During the buildup for WWII, nearly all of the buildable open space at Maxwell Field was filled with WWII temporary buildings. A primary location for WWII temps was in the large recreational field west of Austin Hall. The open field had been an important landscape feature in the 1930s plan. Not only did the field provide playing fields, but it also served as a buffer between the flight lines and the rest of base. However, since the WWII temporary construction on the site, the area has since served as a building location. Currently, the 42nd Air Base Wing Headquarters and associated parking lots fill the space.

A comparison between Figure 176, Figure 177, and Figure 178 shows the developments to Maxwell AFB's operational core from the late 1930s to its

current conditions. A major change that occurred in the operations core was the demolition of WWII temporary buildings west of Austin Hall and the addition of the 42nd Air Base Wing Headquarters (Figure 179).

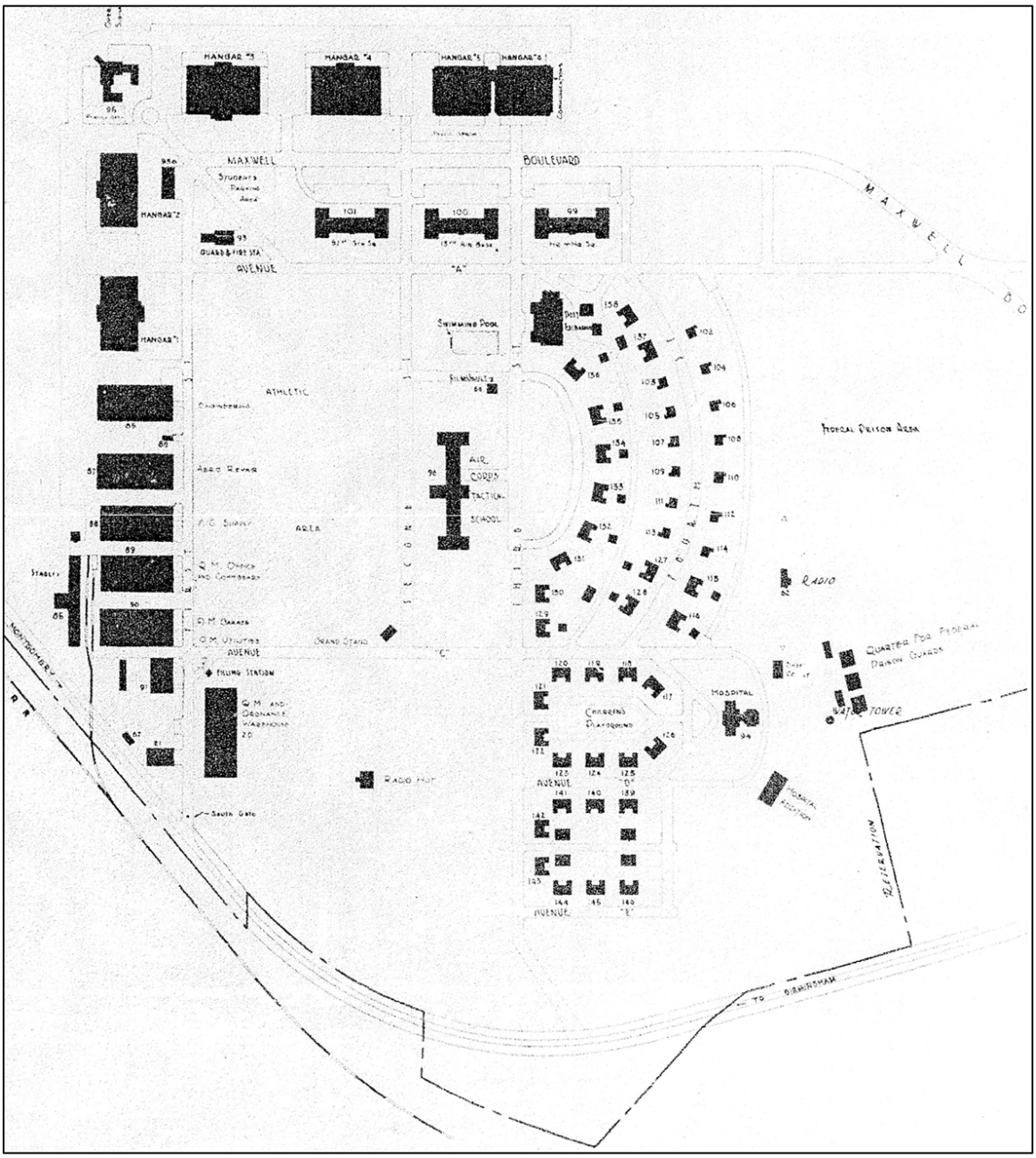

Figure 176. Map of Maxwell Field in the late 1930s. This original area defines the proposed Maxwell Field Historic District (Maxwell AFB Cultural Resources).

Figure 177. The operational core of Maxwell AFB in 1951 showing the WWII infill areas (Maxwell AFB Cultural Resources).

Figure 178. Maxwell AFB operational core in 2012 with the 1951 base map overlaid to show the changes in this area (aerial image from Google Earth; 1951 base map from Maxwell AFB Cultural Resources).

Figure 179. The 42nd Air Base Wing Headquarters was constructed on the former 1930s recreation field west of Austin Hall, 2012 (ERDC-CERL).

The addition of buildings in the operational core has also created a variety of architectural styles. Although many buildings conform to a basic visual continuity of buff-colored stucco walls and red roofs, the architectural styles of the operational core are not uniform.

The vegetation patterns in the operations area have also been altered over time. By the 1940s, the base had been extensively planted with street trees and foundation plantings around most of the buildings. As the vegetation matured, various diseased and overgrown plants were removed while newer landscaping was added. These actions resulted in planting patterns that lack the cohesion of the original planting designs. A comparison between Figure 180 and Figure 181 illustrates the change in the planting patterns for Austin Hall.

Figure 180. Austin Hall in the 1940s showing mature vegetation, undated (Maxwell AFB Cultural Resources).

Figure 181.The vegetation along the foundation of Austin Hall has been significantly altered over time, 2012 (ERDC-CERL).

The former enlisted men's barracks is another area of landscaping where there have been significant changes to the plantings associated with the buildings. Figure 182 and Figure 183 show the differences in the historic planting designs and the current conditions.

Figure 182. Vegetation along the enlisted men's barracks, 1946 (Maxwell AFB Cultural Resources).

Figure 183. The vegetation along the former enlisted men's barracks has been significantly altered, 2012 (ERDC-CERL).

The addition of parking lots around the WWII hangars and on the former apron areas is the most significant change to the hangar landscape (Figure 184). While never extensively planted, the hangars were historically planted with evergreens at their corners. Currently along the lines of hangars there is scattered vegetation which includes some street trees and some foundation plantings. Figure 185 is an example of the current level of vegetation associated with the hangars.

Figure 184. The many parking lots that have been added along the hangar lines are the most significant alteration to the flight lines, 2012 (ERDC-CERL).

Figure 185. Vegetation near the hangars is not consistently planted, 2012 (ERDC-CERL).

4.4.2.2 Senior Officers' Quarters Historic District

There is a high level of landscape integrity in the Senior Officers' Quarters Historic District. The suburban layout remains, as well as the consistent French Provincial architecture, curvilinear streets, sidewalks, and setbacks. The addition of chain-link fencing detracts somewhat from the historic feeling, but this fencing is a military-wide security issue. Also, while there is significant vegetation and planting beds around the more public spaces within this district, the officers' mess, and VOQs, the loss of the swimming pool does affect the landscape integrity somewhat.

In the 1930s, a golf course was designed and constructed north and east of the SOQ. The golf course's location was selected for its proximity to the officers' residences. The golf course continues to contribute to the overall park-like setting of the SOQ and buffers the SOQ from further development. Figure 186 illustrates the conditions of the SOQ area soon after it was constructed. Figure 187–Figure 191 shows the levels of integrity in the SOQ area.

Figure 186. The SOQ area in 1935 (Maxwell AFB Cultural Resources).

Figure 187. The SOQ area retains many of its historic characteristics, such as building spacing and setbacks, street trees, road network, and sidewalks, 2012 (ERDC-CERL).

Figure 188. The SOQ area retains a high degree of integrity, 2012 (ERDC-CERL).

Figure 189. Current vegetation patterns in front of the Maxwell Club, 2012 (ERDC-CERL).

Figure 190. Fencing in the SOQ area that is not historically compatible, 2012 (ERDC-CERL).

Figure 191. Former location of the Officers' Club pool, 2012 (ERDC-CERL).

4.4.2.3 Chennault Circle (Air University) Historic District

While there have been additions to the academic building, for the most part, these have been located to the rear (parking lot) or sides of the buildings, and the front facades have remained intact. Additional parking lots have been added throughout the area. Large parking lots now fill the spaces between Buildings 1401 and 1402 on the east side of the circle and Buildings 1404 and 1405 on the west side of the circle. In original plans for the academic area, these areas were large, open, vegetated spaces with scattered trees that contributed to the park-like setting of the AU. Many mature trees remain around the buildings, adding to the district's campus-like feeling and character (Figure 192 and Figure 193).

Figure 192. An early image of Chennault Circle showing the overall vegetation pattern of the area (Maxwell AFB History Office).

Figure 193. Aerial view of the Chennault Circle area showing added parking and removal of trees, 2013 (bing.com/maps).

Figure 194 and Figure 195 show the integrity along the inner circle of Air University.

Figure 194. Current view along the inner circle of the Air University, 2012 (ERDC-CERL).

Figure 195. Current view along the inner circle of Air University showing the current vegetation patterns, 2012 (ERDC-CERL).

4.4.2.4 Fourth Aviation Squadron Historic District

The remaining cluster of WWII buildings that makes up the proposed Fourth Aviation Squadron Historic District was surveyed under Criterion A for ethnic heritage as the site for the second African-American Army Air Corps unit in Alabama. Little integrity remains of the WWII landscape; gone are the associated chapel, swimming pool, and theater seen on a 1957 map. Picnic tables and landscaping have been added for current building occupants. Figure 196 and Figure 197 show the current landscape conditions of the district.

Figure 196. Buildings 1209, 1210, and 1211 and adjacent landscape in the Fourth Aviation Squadron Historic District, 2012 (ERDC-CERL).

Figure 197. Building 1215 and adjacent landscape in the Fourth Aviation Squadron Historic District, 2012 (ERDC-CERL).

4.4.2.5 Gunter Annex

While there are individual buildings at Gunter Annex on the National Register—the HQ Center (Building 205), the HQ Air Force (Building 900), swimming pool and bath house (Buildings 902 and 904), and SAGE Facility (Building 857)—there is no integrity to the overall landscape. The historic roadways remain intact for the most part, but the loss of buildings and resulting loss of context plus added new buildings highly affect the integrity of the landscape. In addition, the installation feels parceled out and non-cohesive due to multiple private owners/tenants.

Figure 198 shows the original layout of Gunter Field in 1945. In this plan, the buildings are clustered on the west side of the field while the runways and landing field dominate the eastern portion of the base. Figure 199 shows the built environment of Gunter Annex in the 2010s. On the western side of the annex, the grid of high-density WWII temporary buildings has been replaced by two areas of suburban track housing with curved street and cul-de-sac patterns. On the east side of the base that was once the runways and landing field, the land has been sold for private development.

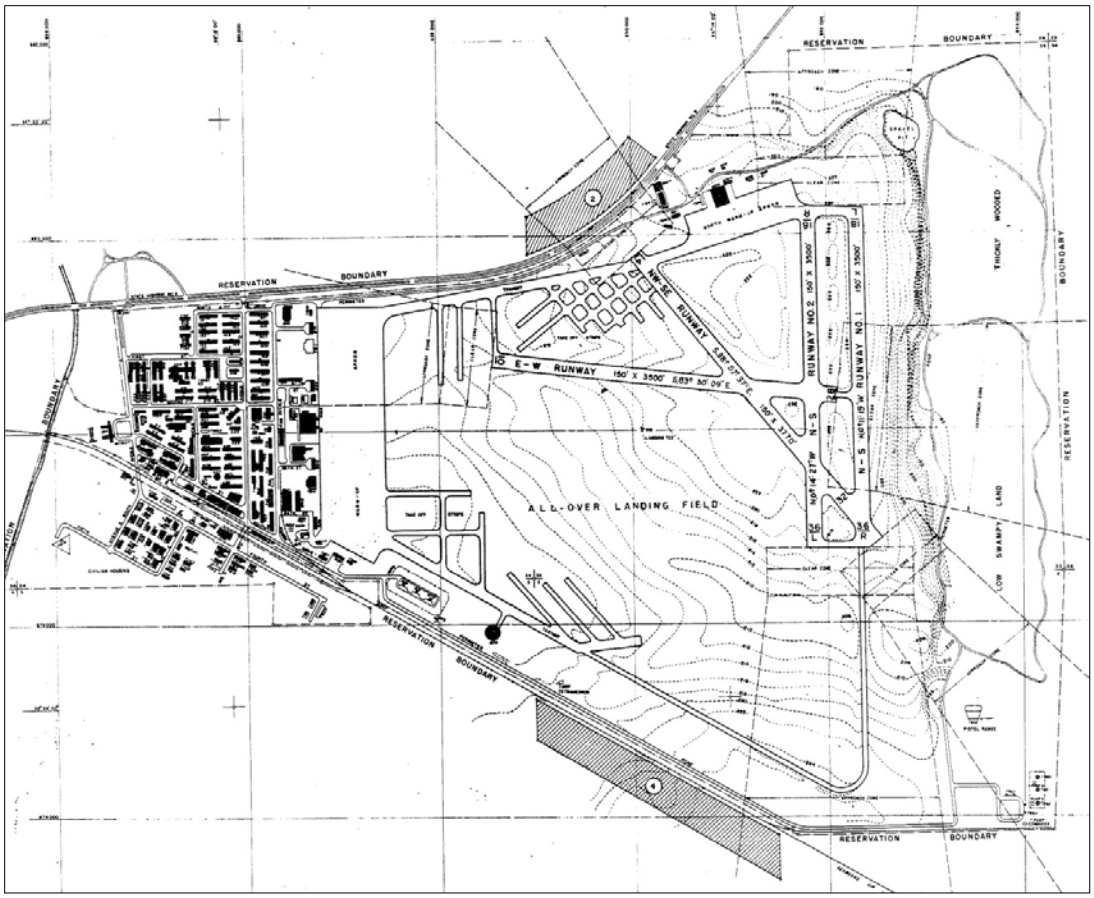

Figure 198. Layout of Gunter Annex in 1945 (Maxwell AFB Cultural Resources).

Figure 199. Aerial view of Gunter Annex in 2010 showing the sold-off landing area and changes to the WWII building groups (Google Earth).

4.4.3 Final determinations

Currently at Maxwell AFB there is one actual listed historic district: the SOQ Historic District, and two eligible districts: the Chennault Circle Historic District and the Fourth Aviation Squadron Historic District. There are also two individually listed buildings—Building 800 and Building 836. Additionally, many of the buildings constructed during the 1930s have been determined eligible for listing on the NRHP.

This report proposes a fourth historic district. Because many of the 1930s-era buildings have been determined eligible, an additional historic district is proposed for the historic core of Maxwell AFB that includes the resources associated with the historic operations of Maxwell Field. It is our recommendation that these two be combined into one district since they were all built at the same time (1930s) for one purpose/mission as home to the ACTS. The creation of one district with one landscape, with the newer buildings as non-contributing, will tie the historic buildings together and make management of this landscape more cohesive. While the landscape was not designed by a notable landscape architect or planner, the base was developed over time according to a master plan and is typical of military installation design used by the Quartermaster Corps during the interwar period. Although the buildup to WWII significantly affected the spatial organization of Maxwell Field, the original layout of the early 1930s base is still evident in the landscape.

The new district, to be called Maxwell Field Historic District, would encompass the area where the operational core of the 1930s construction was located at Maxwell Field. The boundary of this historic district was drawn to include the resources associated with the flight line, the enlisted men's barracks (Buildings 678, 835, and 836—listed), Building 800–listed, and the NCO quarters (bungalows and duplexes). The boundary also includes the former hospital (Building 714) and its associated landscape. The Maxwell Field Historic District emphasizes the interwar planning used for Maxwell Field as well as the Spanish Mission architectural style used throughout this area. Not included in the historic district is the 42nd Air Base Wing Headquarters built in 1990 (Building 804) as well as two hangars (Buildings 841 and 689). Building 804 and the large associated surface parking lots to the north and south of the building were not included because they were completed in 1990 (Figure 200). The hangars were not included because Building 841 has been extensively renovated for use as a fitness center and has consequently lost much of its

integrity. Figure 201 and Figure 202 show the current condition of Building 841 after its conversion to a fitness center. The process of adapting what was originally Hangar 5 and Hangar 6 has resulted in reducing the overall historic integrity of the buildings through the addition of the centralized entrances, additions to the north sides of both hangars, and the replacement of the original hangar doors with concrete block walls.

Figure 200. Although Building 804 was constructed to be sympathetic to the historic characteristics of the 1930s field, it is not included in the Maxwell Field Historic District, 2012 (ERDC-CERL).

Figure 201. Southern façade of Building 841 after conversion to a fitness center, 2012 (ERDC-CERL).

Figure 202. Northern façade of Building 841 after conversion to a fitness center, 2012 (ERDC-CERL).

Building 689 is a WWII hangar built after the interwar-period to house B-29 bombers. This hangar is not individually eligible since it was part of a pair constructed in 1945 and the second hangar was demolished. Building 689 also has been heavily modified, especially on the eastern end. Figure 203 and Figure 204 show the current conditions of Building 689.

Figure 203. Western façade of Building 689, 2012 (ERDC-CERL).

Figure 204. Eastern façade of Building 689, 2012 (ERDC-CERL).

The following paragraphs are the recommendations of this report regarding the one existing and two previously proposed historic districts:

- The SOQ area should remain its own historic district due to its separated location, the French Provincial architectural style, as well as its suburban layout and design which is unlike the typical military planning and design evident in the historic core area at Maxwell AFB and other installations. While these quarters were built using standardized Army plans, they were not built in a typical style and not in a typical military layout (rectilinear). The layout of the quarters is more reminiscent of suburban design and planning principals from the turn of the century. In addition, this report recommends expanding the SOQ Historic District to include Buildings 117, 119, 121, 122, and 144 and the associated landscape surrounding the Maxwell Club and BOQ buildings.
- The Chennault Circle Historic District should remain separate due to its Cold War significance, distinctive layout, and architectural style unlike the rest of the 1930s installation.
- The Fourth Aviation Squadron Historic District should also remain as a separate district because of its physical location and the geographic representation of racial segregation.

Figure 205 is a map showing the four boundaries of the proposed (or expanded) historic districts recommended at Maxwell AFB.

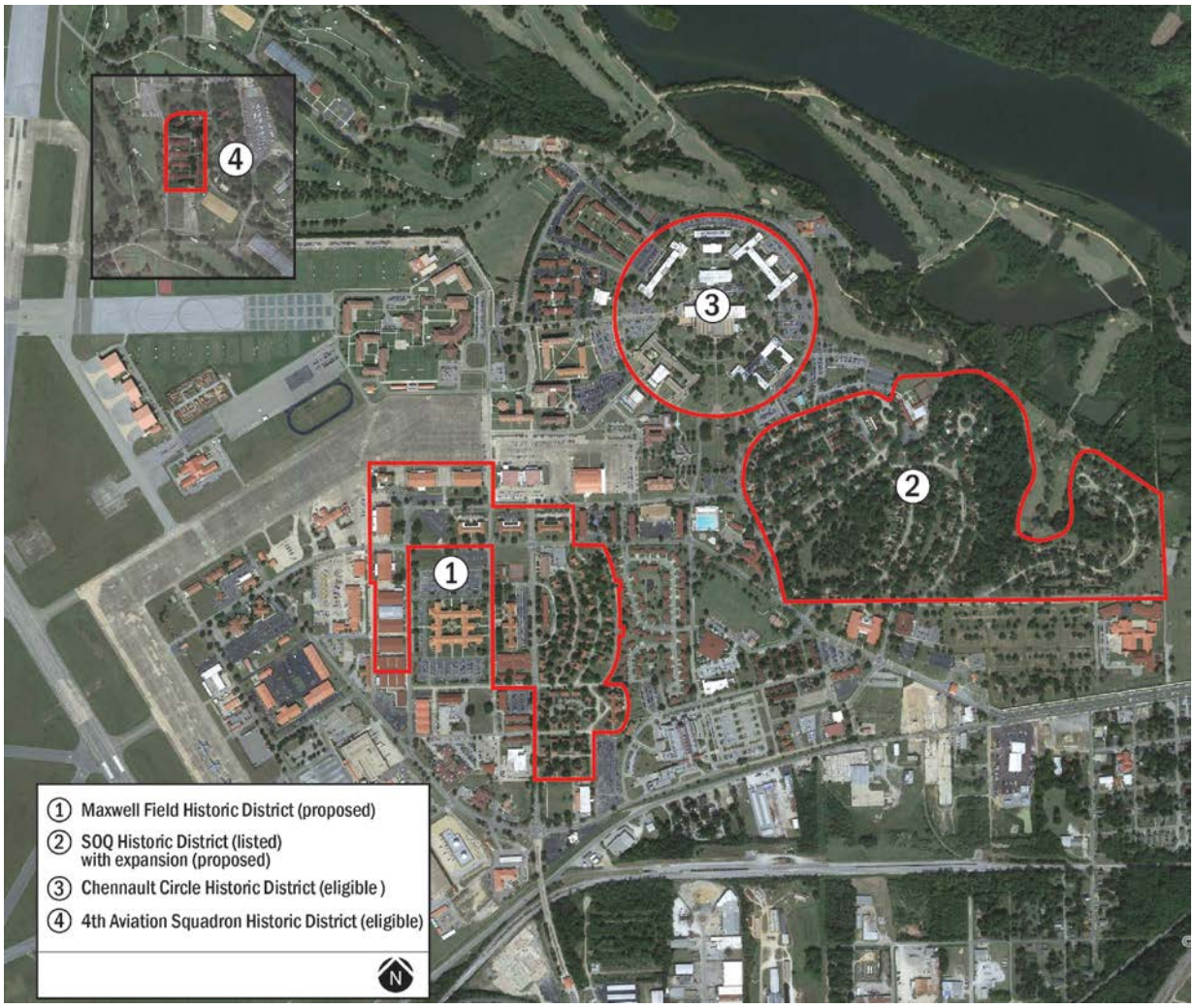

Figure 205. Proposed historic district boundaries in 2012. The 4th Aviation Squadron Historic District is inset (ERDC-CERL enhancement of Google Earth aerial image).

4.4.4 Character-defining features

The character-defining landscape features of the historic areas at Maxwell AFB are elements that physically represent the construction during the specified periods of significance. As a result of the continuation of historic elements, these features convey integrity and collectively define the historic character of district (see Table 1).

Table 1. Component landscapes at Maxwell AFB and listing of their historical significance, character-defining features, and significance/integrity, and NRHP eligibility.

Component Landscapes	Historical Significance	Character-Defining Features	Significance/Integrity	NRHP Eligibility
Operational Core	Designed as the central area of Maxwell Field when the main conglomeration of buildings was redeveloped in the late 1920s. The base plan that was implemented was approved with recommendations by George B. Ford, a nationally recognized planner.	• North-south/east-west orientation of streets and operations and training buildings. • Conveys the connection between the historic flight lines and the former operations center of the base. • Residential streets were either arced or rectilinear to create housing clusters. • Predominant architectural style used throughout the 1930s was Spanish Mission. • Trees lined the streets. • Buildings and quarters were ornamented with vegetation.	• This area still conveys the organization and layout of the 1930s base plan. • This area continues to convey the Spanish Mission architectural style that was originally used for the buildings that comprised the core of the base.	• Building 800—Listed • Building 836—Listed • NCO quarters (bungalows and duplexes)—eligible • Flight line buildings—eligible • Building 714 (former hospital)—eligible • Buildings 678 and 835 (enlisted men's barracks)--eligible

Component Landscapes	Historical Significance	Character-Defining Features	Significance/Integrity	NRHP Eligibility
Flight line and aviation support areas	The flight lines were laid out according to efficiency which maximized the use of the prevailing winds. Accordingly, the hangars and shops were closely aligned with the flight lines.	• The base reorganization that started in the late 1920s organized the hangars in two distinct lines, one running east and west, the other north-south. These two lines bounded the core of Maxwell Field on the north and west sides. • The flight line area was utilitarian. Concrete aprons separated the hangars from the landing field and grassed areas separated the hangars from the main core of the base. • The four 1930s hangars were oriented length-wise along the street while the shops and warehouses were oriented with their widths fronting the street. • The hangars that comprised these flight lines were constructed with subtle Art Deco architectural details. • The operations and terminal building was located at the intersection of the flight lines. • The associated shops and warehouses were also designed using Art Deco motifs.	• The hangars and warehouses associated with the flight line exhibit varying levels of integrity.	• Eligible buildings associated with the historic flight line are: Buildings 842, 843, 844, 845, 846, 848, 849, and 850.

Component Landscapes	Historical Significance	Character-Defining Features	Significance/Integrity	NRHP Eligibility
SOQ area including the officers' community buildings	The SOQ housing was built between 1931 and 1934 as a result of the Army's 1926 expansion program. The houses were designed using French Provincial architectural styling and were spatially arranged to reflect City Beautiful planning ideals that employed curving streets in a park-like landscape.	• SOQ area was located away from the noisy flight lines and operational areas of the base to emphasize the importance of the officers residing there. • Planned and designed to be a park-like area using early twentieth century community planning ideals of curving streets and large open areas. • Trees lined the streets and the houses had large lawns. • Clustered with the officers' quarters were the BOQs and officers' community functions like the officers' club and access to the golf course. • The predominant architectural style used for the 1930s construction was French Provincial. • 150 post-World War I buildings: 99 houses and 51 garages	• The SOQ housing area still reflects the park-like setting that distinguished it from the rest of the base.	• SOQ Historic District was listed on March 2, 1988 • Buildings 117, 119, 121, 122, and 144.are eligible and make up the SOQ Addendum

Component Landscapes	Historical Significance	Character-Defining Features	Significance/Integrity	NRHP Eligibility
Fourth Aviation Squadron district	The Fourth Aviation Squadron was activated in 1941 and was comprised of African-American troops. The troops were housed in a cluster of buildings northwest of the main cantonment to intentionally segregate them from the rest of the base.	• The Fourth Aviation Squadron area was developed in the early 1940s and used typical WWII planning and design principles for the layout of the buildings and their designs. • Because Maxwell Field was racially segregated during WWII, the area was located north of the main core of the base. • The buildings that remain from the Fourth Aviation Squadron area are long one-story rectangles with gabled roofs. • Buildings 1208, 1209, 1210, 1211, and 1215	• Little of the landscape's integrity remains.	• Eligible under Criterion A • Buildings 1208, 1209, 1210, 1211, 1214, and 1215.

Component Landscapes	Historical Significance	Character-Defining Features	Significance/Integrity	NRHP Eligibility
Chennault Circle Historic District	Chennault Circle was built as the campus for Air University between 1955 and 1957. Air University was the primary education facility for high-ranking USAF officers and served as a center for the development of USAF doctrine and strategy during the Cold War.	• The campus buildings were arranged within a large circle facing toward the center where the library was located. • Originally, the academic buildings were two-story concrete structures designed using the International architectural style. • Main façades of the buildings face inward toward the centrally located library. The library faces the formal entrance to the circle. Parking is to outside. • Sidewalks are circular in form, creating concentric rings. • Three wedges radiated off the western side of the circle and contained grouped clusters of barracks. • Trees were planted around the circle and were scattered throughout the open areas, creating a park-like setting. • Evergreens and ornamental trees were planted around the campus buildings. • Eligible buildings: 1400, 1401, 1402, 1403, 1404, 1405, and 1406	• Chennault Circle is an example of the hardened command and control complexes constructed in response to nuclear threats. • The concrete buildings were clad in buff-colored brick in the 1960s; the buildings have been expanded and modified since their construction.	• Eligible under Criteria A and C as well as Criterion Considerati on G • Buildings 1400, 1401, 1402, 1403, 1404, 1405, and 1406.

5 Recommendations for Historic Landscape Preservation

This chapter provides a detailed list of landscape design recommendations that will guide in maintaining and preserving the historic characteristics of the Maxwell AFB landscape. To determine appropriate guidance, authors analyzed historic base plans, planting plans, and photographs to establish the extent of change within the landscape. The planting designs shown in historic photographs were compared with the current landscaping conditions to help direct a planting/landscaping strategy that will reflect the historic precedent of the base as well as meet the new AFI landscaping requirements for low-maintenance vegetation and water conservation. Illustrations of historically compatible landscaping for the major buildings at Maxwell AFB are also included as suggestions for possible planting strategies for the component landscapes.

5.1 Overall management guidelines

- The Maxwell AFB road network was implemented during multiple construction phases. Although there have been alterations to it, there are distinct patterns within the network that signify when a particular area of the base was developed. These patterns provide the overall spatial organization of the landscape. Where possible, maintain the street network as it was originally laid out.

- The master plan of Maxwell AFB grouped related programmatic areas in close proximity to one another. In the 1930s development phase, the training and administration buildings were grouped near the aviation buildings, enlisted men's barracks, and NCO quarters. The SOQ area grouped functions for officers and was located away from the operational area of the base to convey the importance of its residents. Where possible, maintain and reinforce grouping of related functions.

- Maxwell AFB is organized and laid out to convey the order and hierarchy of military culture. Physically reinforcing how the base was historically planned and organized will spatially define military culture.

- The use of open space, parks, and wide tree-lined streets give the districts a suburban feeling. Maintain the existing street tree network and where possible retaining open spaces and parks which will reflect the characteristics of the historic plans.

- Architectural continuity throughout the base is conveyed through shared architectural styles. For example, Spanish Mission style was used in the 1930s historic core, and French Provincial style was used in the SOQ. In areas with shared architectural styles, any new undertakings should aesthetically blend with the historic characteristics of the architectural features.

Figure 206 is a map of the landscape management guidelines that apply for all the listed, eligible, and proposed historic districts.

Maintain the road network pattern to reinforce the historic development of Maxwell AFB.

historic road pattern outlined in black

Maxwell AFB is organized and laid out to convey the order and hierarchy of military culture. Continue to emphasize significant features.

significant historical buildings are identified as part of the spatial hierarchy

The use of open space, parks, and wide tree-lined streets give the districts a suburban feeling . Maintain the existing street tree network and where possible retaining open spaces and parks.

significant open spaces

Architectural continuity throughout the base is conveyed through distinct architectural styles. In areas with shared architectural styles, any new undertakings should aesthetically blend with the historic characteristics of the architectural features.

Spanish Mission architectural style in the 1930s operational core.

French Provincial architectural style in the SOQ area.

International style in Chennault Circle

WWII utilitarian aesthetics in the 4th Aviation Squadron area.

Figure 206. Overall management guidelines, 2013 (ERDC-CERL).

5.2 District-wide design recommendations

- Maintain the street trees throughout the district; if one is removed, replace it with an in-kind species to preserve the spacing and placement of trees. Add trees along roads within the historic districts where there are currently none. Streets on the outskirts of the district should be planted with trees.

- Where specified, all areas should be at least minimally planted and well maintained. The quality and level of landscaping varies within the historic district(s) from poor to quite good. This is not a function of hierarchy within the planting plans, but is rather due to pest and disease problems, lack of maintenance, or individual efforts.

- The planting plans from the periods of significance (original construction from 1927—1934 and the WWII buildup throughout 1939-1945) should be consulted regarding the placement and scale of new vegetation in the historic areas. The original intent and character of the planting scheme should be retained. However, when possible replace vegetation with pest-free and disease-free varieties or native plants.

- For visual continuity throughout the district(s), establish one or two natural mulch types and implement a uniform garden edging type.

- Small-scale features should be similar in their design, type, and color scheme. Examples of small-scale features include street lighting, benches, and signage. Using a consistent array of these elements will give the district(s) a unified appearance.

- New construction in the historic district(s) should preserve the design intention of the original, late 1920s—1940s layout of the base. Consequently, the street network should not be altered.

5.3 Component landscape design recommendations

This section provides illustrative guidance on how historic planting designs can be translated to meet the current landscaping requirements of the military. While the overall management guidelines given previously are meant to address all the historic districts, the component landscape design recommendations are specific to the functional areas of the base.

5.3.1 Aviation/flight line area

- Where possible, street trees should line the major streets on the cantonment sides of the flight lines.

- Historically, there was minimal vegetation around the hangars and the buildings should remain that way.

- Base Operations (Building 844) should be landscaped according to historically appropriate planting plans. In particular, the southeast entrance area should feature ornamental plants.

- The warehouses and shop buildings were historically planted with evergreens as accents on building corners. These buildings should be, at minimum, simply planted in a scheme that reflects the historic plans for the area.

Because the flight line area lacked formalized planting plans; the planting in this area should use minimal vegetation.

5.3.2 Maxwell Field Historic District

Figure 207 shows the overall street tree planting plan for the operational core. Planting proposals for specific buildings follow.

Figure 207. The overall street tree planting strategy for the historic core district. Not to scale, 2013 (ERDC-CERL).

5.3.2.1 Austin Hall/Building 800

- Street trees should line the streets on the east and west side of Building 800.

- The landscaping on the west side of Building 800 should reflect the importance of the building's function and should be based on the landscaping designs that were originally installed. Plants selected for this design should be low maintenance and preferably native to the region.

- The landscaping should extend around the building with the most elaborate plantings used near the main entrance. On all sides, vegetation should be used to screen transformers and other infrastructure that distracts from the building's aesthetic.

Figure 208 provides an example plan of how Building 800's landscape could be modified to more accurately represent the historic planting design for the building.

Note: The planting pattern and plants specified are repeated along the western facade of Building 800.

Figure 208. Proposed diagrammatic planting plan for Building 800, 2013 (ERDC-CERL).

5.3.2.2 Enlisted men's barracks

- Street trees should line the streets on the north and south side of the three enlisted men's barracks.

- The landscaping should extend around the building with the most elaborate plantings used near the main entrance. On all sides, vegetation should be used to screen transformers and other infrastructure that distracts from the building's aesthetic.

5.3.2.3 Former Post Exchange

- Street trees should line the major streets surrounding the former PX area. Particularly in this area, trees should continue to line the streets.

- The planting design for the former PX building should be compatible with the vegetation of Building 800 and the enlisted men's barracks. To have compatible landscaping, the vegetation used should feature a variety of species and be well maintained.

- The planting design for this area should use low-maintenance, drought-tolerant, ornamental plants.

5.3.2.4 NCO quarters (bungalows and duplexes)

The residential areas provide an opportunity for more ornamental planting plans to be incorporated in the landscape of Maxwell AFB. The following recommendations provide general guidance for leasing agencies and residents on developing historically compatible landscaping plans for the NCO quarters.

- Maintain the trees along all the streets. If needed, replace diseased or damaged trees in kind.

- The organization of the NCO housing areas should be maintained, including the hierarchy of streets and the housing organization.

- Appropriate shade trees could be added around play areas.

- Functional spaces like the alleys, parking spaces, and backyards should be screened with vegetation.

- Plants should be planted far enough from the quarters to ensure their mature size will not damage the façade or foundation. The mature size of a plant should also be considered in regard to the scale of the house; larger houses can accept larger plants, while smaller houses are overwhelmed by out of scale vegetation.

- At the duplex NCO quarters, the landscaping should be consistent around the façade and sides of the residence.

- Vegetation should be selected that requires minimal maintenance. When possible, choose varieties native to the region. Groundcovers should be used to control weeds under larger plants.

5.3.2.5 Former hospital

- Street trees should line the area west of the hospital.

- The main façade of the hospital should be planted to reflect the ornamentation of the entrance. Planting plans for the hospital should be based on the original landscape design for the area which included evergreen accenting the building's corners. However, the vegetation should not dominate the entrance and should be planted far enough from the building so that at full size it will not damage the exterior.

Figure 209 provides an example plan of how the former hospital's landscape could be modified to more accurately represent the historic planting design for the building.

Figure 209. Planting plan for the former hospital, 2013 (ERDC-CERL).

5.3.3 Senior Officers' Quarters Historic District

The SOQ residential areas provide an opportunity for more ornamental planting plans to be incorporated in the landscape of Maxwell AFB. The following recommendations provide general guidance for leasing agencies and residents on developing historically compatible landscaping plans for the officers' quarters.

5.3.3.1 Senior Officers' Quarters

- The SOQ housing area layout is a distinct element of Maxwell AFB. Therefore, the spatial characteristics of the area should be maintained; these characteristics include the network of streets and open spaces, the architectural style of the buildings, street tree density, and vegetation patterns.

- The Maxwell AFB SOQ housing was strategically located away from the flight lines to provide a physical separation from the noise and activity of the airfield as well as to signify the importance of the officers living in the area.

- In the SOQ area, functional spaces such as backyards, patios, and clotheslines should be screened with vegetation.

- A consistent palette of plant material, mulch, and edgings should be used. The housing partner should make sure individual residential plantings are consistent with the overall character of the neighborhood. In general, the plantings should be of similar size, massing, ornamentation, and form.

- It is ideal to have a mix of deciduous and evergreen plants. Select plants that have different flowering times, plants that provide winter interest, and a variety of textures and habits.

- Vegetation should be selected that requires minimal maintenance. When possible, choose varieties native to the region. Groundcovers should be used to control weeds under larger plants.

- Plants should be planted far enough from the quarters to ensure their mature size will not damage the façade or foundation. The mature size of a plant should also be considered in regard to the scale of the house; larger

houses can accept larger plants, while smaller houses are overwhelmed by out-of-scale vegetation.

Figure 210–Figure 214 provide example plans and elevations of how SOQ Historic District's landscape could be modified to more accurately represent the historic planting design of the district.

Figure 210. Example planting plan for Unit Type U, SOQ, 2013 (ERDC-CERL).

Figure 211. Example planting elevation for Unit Type U, SOQ, 2013 (ERDC-CERL).

Figure 212. Example planting plan for Unit Type Q, SOQ, 2013 (ERDC-CERL).

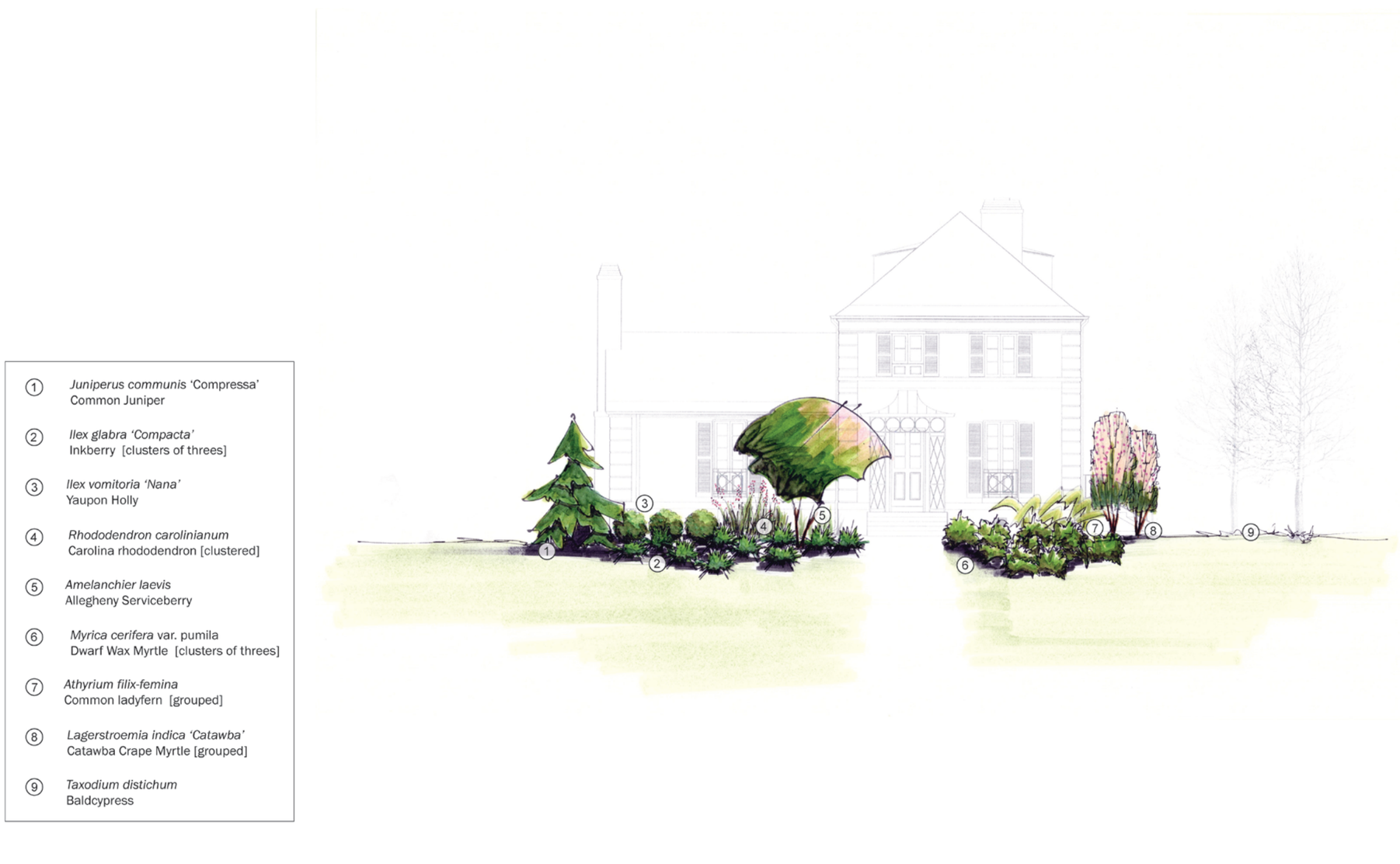

Figure 213. Example planting elevation for Unit Type Q SOQ, 2013 (ERDC-CERL).

Figure 214. Example planting elevation for Unit Type V SOQ, 2013 (ERDC-CERL).

5.3.3.2 Maxwell Club

- Planting patterns should extend around the officer's club and incorporate any additional entrances and views to the building. The landscaping should also highlight the unique French Provincial architectural style of the building.

- Historically, evergreens were most often used in foundation plantings at Maxwell AFB. However, it is ideal to have a mix of deciduous and evergreen plants. Consider planting a mix of flowering trees (with visible branching structure) and an evergreen groundcover bed (not to exceed a height of 12 in.). In addition, highly columnar evergreens can be used to mark entrances and create form. The use of flowering plants near building entrances can give needed interest. When possible, select native plants that correspond to the habit, texture, and showiness of the originally-specified plants.

- Grouping plants is more effective at creating visual and spatial interest than a sporadically planted row. Historically, groupings of plants were used at the corners of buildings, adjacent to doorways, and to soften large areas of buildings that lacked architectural features.

- The officers' club should spatially relate to the surrounding buildings, in particular the BOQ. Continuity should be preserved between the buildings, open spaces, roadways, and the rest of the installation.

5.3.3.3 Bachelor Officers' Quarters

- Planting patterns should extend around the BOQ and incorporate any additional entrances and views to the building.

- Historically, evergreens were most often used in foundation plantings at Maxwell AFB. However, it is ideal to have a mix of deciduous and evergreen plants. Consider planting a mix of flowering trees (with visible branching structure) and an evergreen ground cover bed (not to exceed a height of 12 in.). In addition, highly columnar evergreens can be used to mark entrances and create form. The use of flowering plants near building entrances can give needed interest. When possible, select native plants that correspond to the habit, texture, and showiness of the originally-specified plants.

- Using mature spread as an indicator, plant trees and shrubs several feet from the building to prevent damage to the foundation and façade.

- Grouping plants is more effective at creating visual and spatial interest than a sporadically planted row. Historically, groupings of plants were used at the corners of buildings, adjacent to doorways, and to soften large areas of buildings that lacked architectural features.

- The BOQ should spatially relate to the surrounding buildings, in particular the Maxwell Club. Continuity should be preserved between the buildings, open spaces, roadways, and the rest of the installation.

5.3.4 Chennault Circle

- Where possible, street trees should line the major streets in Chennault Circle (Area 1400).

- Chennault Circle was, and still is, an important area at Maxwell AFB. The area was designed to provide a park-like setting for the AU and consequently, the area should feature landscaping that is in keeping with this intention.

- The buildings should feature foundation plantings reminiscent of the historic planting plans for the area. Vegetation around these buildings should be spaced uniformly and according to a cohesive design for the area.

- However, the façades of the buildings that face major roads should receive more extensive plantings. Selected plants should be drought tolerant and native.

- Grouping plants is more effective at creating visual and spatial interest than a sporadically planted row. Historically, groupings of plants were used at the corners of buildings, adjacent to doorways, and to soften large areas of buildings that lacked architectural features.

- Where feasible, parking lots in the northern half of Chennault Circle should be lined with trees.

- Consider lining the sidewalks in the area with small ornamental trees to provide shade and seasonal interest.

- Air Park is at the southern point of Chennault Circle between the Squadron Officer School and the Air Command and Staff College. This area should be maintained as an open space for the display of historic aircraft. Landscaping in this area should be ornamental and reflect the significance of the objects on display.

Figure 215 provides an example plan of how Chennault Circle's landscape could be modified to more accurately represent the historic planting design for Area 1400.

5.3.5 Fourth Aviation Squadron area

- The spatial relationships between the remaining buildings in the Fourth Aviation Squadron area should be retained.

- The area should be landscaped with shade trees and evergreens.

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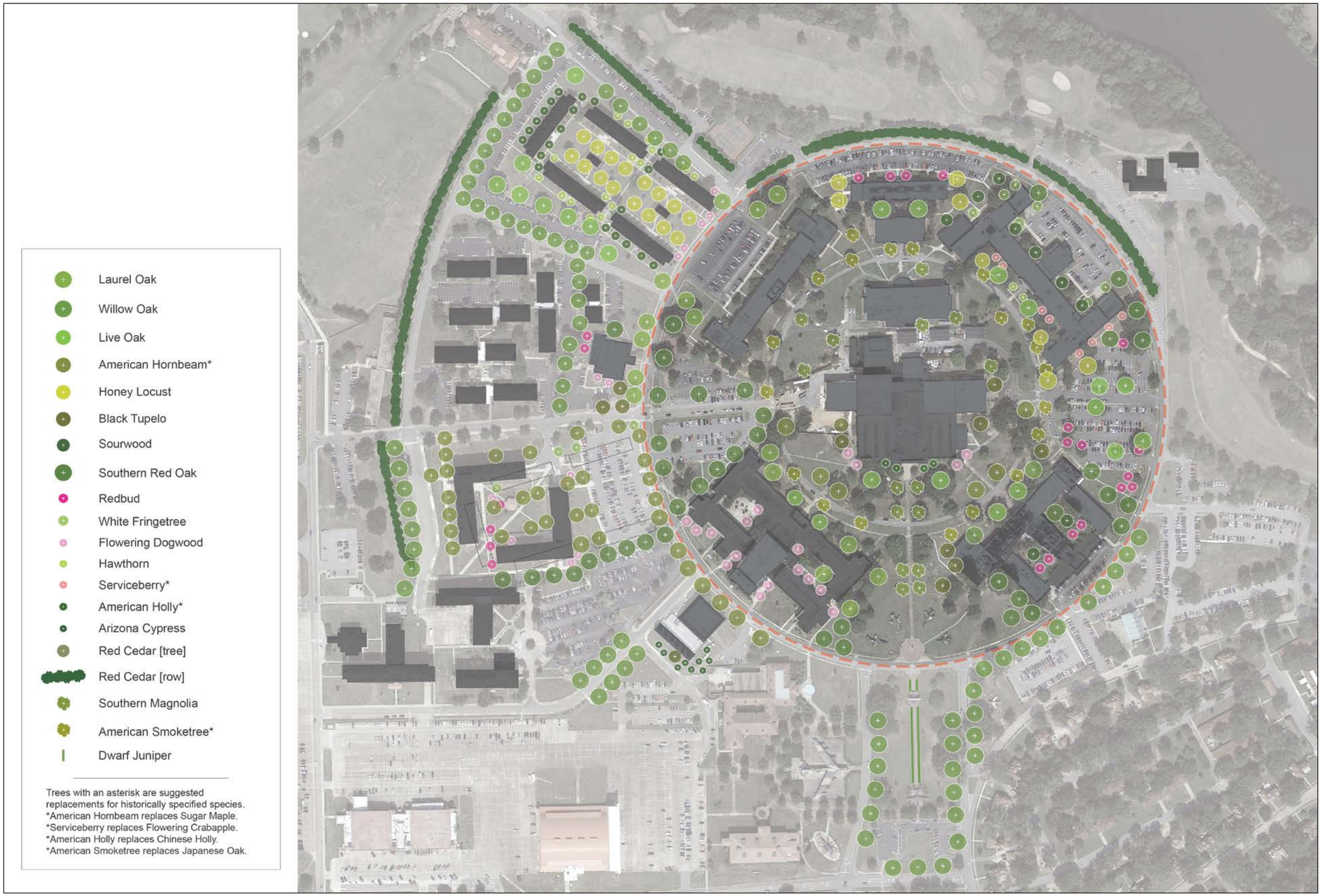

Figure 215. Chennault Circle (Area 1400) overall planting plan based on the historic 1950s planting plan, 2013 (ERDC-CERL).

6 Conclusion

Maxwell AFB is well maintained, and its historic developments are clearly seen in the physical landscape of the base. Although the historic areas have undergone changes, the overall quality and characteristics of the area remain consistent as the cantonment has grown. Maxwell AFB also is a good example of the military's execution of 1930s city planning principles.

This report documents the historic landscapes of Maxwell AFB and evaluates them for their military significance and historic integrity. This report identifies several landscapes that are significant to military history, history of Maxwell AFB, and the history of urban planning in the United States. These landscapes include the 1930s Inter-war era development, WWII-era additions, and the addition of the AU campus. This report proposes a consolidated historic district called the Maxwell Field Historic District that encompasses the 1930s Inter-war era development including the flight lines and aviation support areas; the administration and operations buildings; the NCO quarters, both bungalows and duplexes; and the original hospital building. In addition to the Maxwell Field Historic District, this report documents the WWII-era Fourth Aviation Squadron Historic District and the Cold War-era Chennault Circle education complex. The report also includes recommendations to help preserve the historic characteristics of the base as well as to allow Maxwell AFB to meet mission requirements and continue to grow. Planting plans are included for several of the prominent support buildings and the residential types and styles. A plant list has been generated based on the historic planting plans from the 1940s and 1950s with recommendations for pest-free and disease-free sustainable plant material.

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Appendix A: Plant Lists

Table 2 lists the plants that were specified on the historic drawings and plans of Maxwell AFB. This list provides a starting point for understanding the historic vegetation patterns and for selecting plants that are historically compatible. However, over time, plants from this list have proven to not work well in the environmental conditions of the region. When selecting plants for a historic district, either use species that were historically specified or select plants with better qualities that reflect the characteristics (habit, texture, size, and ornamental value) of the plants being replaced. Table 3–Table 5 are lists of approved and not-allowed plants for Maxwell AFB. Consult the current plant list to verify which historic species are approved for planting on Maxwell AFB.

Table 2. List of plants from historic planting plans.

Scientific Name	Common Name	Native to the United States	Distinguishing Characteristics	Comments by the Maxwell AFB horticulturalist on historical plant list
Acer palmatum	Japanese Maple		• Small tree • Good fall color	• Understory tree with dappled shade
Acer rubrum	Red Maple	Native	• Deep scarlet fall color • Grows in swamps or poor, dry soils • Root system can be invasive and is a poor choice for plantings near paving	• Does not thrive in the environmental conditions at Maxwell AFB
Acer saccharinum	Silver Maple	Native	• Fast growing • Highly adaptable to environmental conditions • Roots are shallow and can cause damage to paving	• Does not thrive in the environmental conditions at Maxwell AFB
Acer saccharum	Sugar Maple	Native	• Bright fall foliage • Shallow roots may interfere with grass growing under the tree	• Does not thrive in the environmental conditions at Maxwell AFB

Scientific Name	Common Name	Native to the United States	Distinguishing Characteristics	Comments by the Maxwell AFB horticulturalist on historical plant list
Albizia julibrissin	Silktree (Mimosa)		• Small tree with a broad crown of level or arching branches • Flowers are produced throughout the summer in dense inflorescences • Highly susceptible to mimosa vascular wilt	• Should not be used on Maxwell AFB
Betula nigra	River Birch	Native	• Can grow in flood plains and swamps • Often has multiple trunks • Distinct, curling bark	• Approved for current planting, but messy
Butia capitata	Pindo Palm		• Slow growth • Thick, stout trunk with feather palm pinnate leaves	• Produces lots of edible fruit that attracts wildlife, but is messy • Approved ornamental, but is incongruous with base plantings
Carya illinoinensis	Pecan	Native	• Large tree • Edible seeds	• Approved for use on Maxwell AFB
Carya ovata	Shagbark Hickory	Native	• Large tree • Edible nuts	• Approved for use on Maxwell AFB
Cedrus deodara	Deodar Cedar		• Large evergreen coniferous tree • Conic crown with level branches and drooping branchlets	• Approved for use on Maxwell AFB
Celtis laevigata	Hackberry	Native	• Primarily grows along streams and in moist soils on floodplains • Leaf litter inhibits seed germination and growth in many other plant species • Well adapted to urban areas	• Approved for use on Maxwell AFB

Scientific Name	Common Name	Native to the United States	Distinguishing Characteristics	Comments by the Maxwell AFB horticulturalist on historical plant list
Cercis canadensis	Redbud	Native	• Large shrub or small tree • Showy pink flowers in spring • Understory tree	• Approved for use on Maxwell AFB
Chionanthus virginicus	White Fringetree	Native	• Large shrub or small tree • Richly-scented white flowers in spring • Fruit is an ovoid, dark blue-purple drupe	• Approved for use on Maxwell AFB
Cornus florida	Flowering Dogwood	Native	• Small tree • White flowers are produced in dense, rounded, umbel-shaped groups • Does not grow well when exposed to intense heat sources such as adjacent parking lots • Susceptible to disease and pest pressure	• Approved for use on Maxwell AFB • Understory tree • Anthracnose (fungus) issues
Cratagus spp.	Hawthorn	Some species native to North America	• Large shrubs or small trees • Thorny branches • Highly recommended for water conservation landscapes	• Select thornless cultivars • Berries can be messy
Eriobotrya japonica	Loquat		• Evergreen large shrub or small tree • Short trunk and a rounded crown • Edible fruit • Easy to grow in subtropical to mild temperate climates	• Fruit considered a choking hazard at Maxwell Child Development Center.
Fraxinus americana	White Ash	Native	• Cultivars have superior fall color • Susceptible to the emerald ash borer	• Approved for use on Maxwell AFB

Scientific Name	Common Name	Native to the United States	Distinguishing Characteristics	Comments by the Maxwell AFB horticulturalist on historical plant list
Ginkgo biloba-male	Ginkgo		• Brilliant yellow fall foliage • Resistant to disease and insects	• Approved for use on Maxwell AFB • Male trees only
Gleditsia triacanthos	Honey Locust	Native	• Thorny • Tall and fast growing • Brilliant-yellow fall color	• Only use thornless varieties • Seed pods are messy–choose location carefully • Some disease and pest problems
Ilex cornuta	Chinese Holly		• Densely-foliaged evergreen shrub • Slow growing • Attractive rectangular foliage and large red berries	• Approved for use on Maxwell AFB
Ilex opaca	American Holly	Native	• Medium-sized evergreen tree • Greenish white flowers and stiff glossy leaves • Red berries persistent into winter	• Approved for use on Maxwell AFB
Juniperus virginiana	Eastern Red-Cedar	Native	• Dense slow-growing coniferous evergreen tree • Reddish-brown bark • Grows well under adverse conditions	• Approved for use on Maxwell AFB
Lagerstroemia indica	Crape Myrtle		• Multi-stemmed, deciduous tree • Smooth, grey bark • Showy flowers that are either white, pink, mauve, purple, or carmine • Frost tolerant	• Approved for use on Maxwell AFB

Scientific Name	Common Name	Native to the United States	Distinguishing Characteristics	Comments by the Maxwell AFB horticulturalist on historical plant list
Liquidambar styraciflua	American Sweetgum	Native	• Medium-to-large deciduous tree • Good reddish-orange fall color • Popular ornamental tree in temperate climates	• Approved for use on Maxwell AFB • Seed pods can be nuisance–choose location carefully
Maclura pomifera	Osage-orange	Native	• Large deciduous tree • Commonly used in hedgerows • Rot, disease, and insect resistant • A thornless male cultivar is propagated for ornamental use	• Thornless cultivar is approved for use on Maxwell AFB • Fruit is messy–choose location carefully
Magnolia grandiflora	Southern Magnolia	Native	• A large striking evergreen tree with large dark green leaves • Large showy white fragrant flowers	• Approved for use on Maxwell AFB
Magnolia x soulangiana	Saucer Magnolia		• Small deciduous tree • Large, early-blooming flowers in various shades of white, pink, and purple • Tolerant to wind and alkaline soils	• Approved for use on Maxwell AFB
Magnolia virginiana	Sweetbay Magnolia	Native	• Deciduous or evergreen tree, depending on climate • Creamy white flowers with a strong vanilla scent	• Approved for use on Maxwell AFB
Malus sps.	Crabapple	Some species are native	• Small trees or shrubs primarily grown as ornamentals • Blooms in spring and has colorful fruit in fall	• Not recommended for use on Maxwell AFB • Fruit is messy
Nyssa sylvatica	Black Gum (or Black Tupelo)	Native	• Medium-sized deciduous tree • Good scarlet fall color	• Approved for use on Maxwell AFB

Scientific Name	Common Name	Native to the United States	Distinguishing Characteristics	Comments by the Maxwell AFB horticulturalist on historical plant list
Oxydendrum arboreum	Sourwood	Native	• Small deciduous tree or large shrub • Good fall color	• Approved for use on Maxwell AFB
Pinus taeda	Loblolly Pine	Native	• Tall coniferous tree • Rapid growth	• Approved for use on Maxwell AFB
Platanus occidentalis	American Sycamore	Native	• Very large deciduous tree • Distinct white and tan mottled bark • Grows well in a variety of conditions making it a good street tree	• Approved for use on Maxwell AFB
Prunus serotina	Black Cherry	Native	• Deciduous small- to medium-sized tree • Small, white, fragrant flowers • Fairly common ornamental tree	• Foliage is poisonous • Fruit is edible
Quercus alba	White Oak	Native	• Not a very tall deciduous tree, but it can seem massive because its lower branches extend far out laterally, parallel to the ground • Deep red fall color • Outstanding shade tree • May thrive in residential areas	• Approved for use on Maxwell AFB
Quercus borealis more commonly called *Quercus rubra*	Northern Red Oak	Native	• Medium to tall deciduous tree • Rich red fall color • Fast growing under optimal conditions	• Lots of acorns attract wildlife
Quercus falcata	Southern Red Oak	Native	• Medium-sized deciduous tree	• Approved for use on Maxwell AFB

Scientific Name	Common Name	Native to the United States	Distinguishing Characteristics	Comments by the Maxwell AFB horticulturalist on historical plant list
Quercus laurifolia	Swamp Laurel Oak/Water Oak	Native	• Medium-sized deciduous or semi-evergreen oak • Commonly used as an ornamental tree because of its fast growth and pleasing appearance • Withstands a wide range of soil types	• Approved for use on Maxwell AFB • Lots of acorns attract wildlife
Quercus palustris	Pin Oak/Swamp Oak	Native	• Medium-sized deciduous tree • Predominantly bronze fall color • Confined to acidic soils	• Approved for use on Maxwell AFB
Quercus phellos	Willow Oak	Native	• Medium-sized deciduous tree • Moderately fast growth • Hardy in a variety of conditions	• Approved for use on Maxwell AFB
Quercus stellata	Post Oak	Native	• Small deciduous tree • One of the most common oaks in the southern part of the eastern prairies	• Approved for use on Maxwell AFB
Quercus virginiana	Southern Live Oak	Native	• Large evergreen oak tree • Long lived and needs very little cultivation	• Approved for use on Maxwell AFB
Robinia pseudoacacia	Black Locust	Native	• Tall deciduous tree • Golden fall color • Can grow in poor soils	• Has demonstrated invasive tendencies • Not recommended for use on Maxwell AFB
Sapium sebiferum also known as *Triadica sebifera*	Chinese Tallow Tree		• Considered to be a noxious invader in the southern United States	• Do not use on Maxwell AFB

Scientific Name	Common Name	Native to the United States	Distinguishing Characteristics	Comments by the Maxwell AFB horticulturalist on historical plant list
Taxodium distichum	Bald Cypress	Native	• Large deciduous tree • Popular ornamental tree for its light, feathery foliage and orange-brown bark • Thrives in a wide range of soils	• Approved for use on Maxwell AFB
Thuja occidentalis	Arborvitae or White Cedar	Native	• Evergreen coniferous small tree • Widely cultivated as an ornamental plant	• Pending approval for use on Maxwell AFB
Trachycarpus fortunei	Windmill Palm		• Tall fan palm • Tolerant of cool summers and cold winters	• Not recommended for use on Maxwell AFB • Requires high maintenance-old leaves must be removed
Ulmus americana	American Elm	Native	• Tall deciduous tree • Highly susceptible to Dutch Elm disease	• Not recommended for use on Maxwell AFB unless a disease-resistant cultivar is selected •
Ulmus pumila	Siberian Elm		• Small-to-medium bushy deciduous tree • Yellow fall color • Highly susceptible to damage from many insects and parasites • Considered an invasive species in much of North America	• Not recommended for use on Maxwell AFB

Table 3–Table 5 list trees and shrubs currently designated by Maxwell AFB Cultural Resources to be approved, acceptable, or undesirable for planting on Maxwell AFB. However, the listings are not all-inclusive. For species not appearing on these lists, consult with the Maxwell AFB Natural Resources Manager or horticulturalist.

Table 3. Trees approved for planting on Maxwell AFB.

Allegheny Chinkapin *Castanea pumila*	Buckeye, Yellow *Aesculus octandra*	Japanese Grey-Bark Elm *Zelkova serrata*
American Beech *Fagus grandifolia*	Cedar, Deodar *Cedrus deodara*	Katsura Tree *Cercidiphyllum japonica*
American Chestnut *Castanea dentata*	Chinese pistache *Pistacia chinensis*	Kentucky Coffeetree *Gymnocladus dioica*
American Hornbean *Carpinus caroliniana*	Crape Myrtle *Lagerstroemia sp.*	Loblolly-Bay *Gordonia lasianthus*
American Smoketree *Cotinus coggygria*	Dawn redwood *Metasequoia glyptostroboides*	London planetree *Platanus x acerifolia*
American Sycamore *Platanus occidentalis*	Dogwood, flowering *Cornus florida*	Magnolia, most varieties *Magnolia sp.*
Amur Maackia *Maackia amurensis*	Eastern Redbud *Cercis canadensis*	Maple, Trident *Acer buergeranum*
Ash, Green *Fraxinus pennsylvanica*	Eastern Red Cedar *Juniperus virginiana*	Oak, Black *Quercus velutina*
Ash, White *Fraxinus americana*	Fringetree *Chionanthus virginicus*	Oak, Blackjack *Quercus marilandica*
Beech, European *Fagus sylvatica*	Ginkgo, Male tree only *Ginkgo biloba*	Oak, Bluejack *Quercus incana*
Birch, Sweet *Betula lenta*	Hackberry *Celtis occidentalis*	*Oak, Bur *Quercus macrocarpa*
Birch, River *Betula nigra*	Hardy Rubbertree *Eucommia ulmoides*	Oak, Chestnut *Quercus prinus*
Baldcypress *Taxodium distichum*	Hickory, most native varieties *Carya sp.*	*Oak, Chinkapin *Quercus muehlenbergii*
Blackgum or Tupelo *Nyssa sylvatica*	Holly, most varieties, EXCLUDING Rotunda var. *Ilex sp.*	Oak, Cherrybark *Quercus pagoda*
Buckeye, Ohio *Aesculus glabra*	Japanese-Cedar *Cryptomeria japonica*	Oak, Durand *Quercus durandii*

Oak, English *Quercus robur*	Oak, Swamp White *Quercus bicolor*	Sugarberry *Celtis laevigata*
*Oak, Laurel *Quercus laurifolia*	Oak, Turkey *Quercus laevis*	Sweetbay Lauris noblis
*Oak, Live *Quercus virginiana*	Oak, White *Quercus alba*	Sweetgum *Liquidambar styraciflua*
*Oak, Nuttall *Quercus nuttallii*	Oak, Willow *Quercus phellos*	Swamp Cottonwood *Populus heterophylla*
Oak, Overcup *Quercus lyrata*	Oriental Planetree *Platanus orientalis*	Swamp Tupelo *Nyssa biflora*
Oak, Post *Quercus stellata*	Persian Ironwood *Parrotia persica*	Walnut, Black *Juglans nigra*
Oak, Scarlet *Quercus coccinea*	Pines, most native varieties and cultivars *Pinus sp.*	Walnut, White (Butternut) *Juglans cinerea*
Oak, Shingle *Quercus imbricaria*	Serviceberry *Amelanchier spp.*	White Basswood *Tilia heterophylla Tiliaceae*
*Oak, Shumard *Quercus shumardii*	Sourwood *Oxydendrum arboreum*	Willow, Weeping *Salix babylonica*
Oak, Southern Red *Quercus falcata*	Southern Catalpa *Catalpa bignonioides*	Witch Hazel *Hamamelis sp.*
Oak, Swamp Chestnut *Quercus michauxii*	Southern Waxmyrtle *Myrica cerifera*	Yellow Poplar *Liriodendron tulipfera*

*** Indicates highly recommended, hardy species that thrive in MAFB conditions**

Table 4. Shrubs approved for planting on Maxwell AFB.

Abelia shrubs **Abelia sp*	Fuzzy deutzia *Deutzia scabra*	Lorapetalum – only dwarf varieties authorized *Loropetalum*
Anisetree, small *Illicium parviflorum*	Golden St. John's wort *Hypericum frondosum*	Mahonia *Mahonia sp*
Anisetree, Florida *Illicium floridanum*	Holly, most varieties & Cultivars, except Rotunda *Ilex sp*	Podocarpus *Podocarpus sp*
Azaleas *Rhododendron* sp – azaleas only	Hydrangea *Hydrangea sp*	Southern waxmyrtle *Myrica cerifora*
Butterfly bush *Buddleia sp*	Indian hawthorn (white flowering) *Raphieolepis indica*	Spirea *Spiraea* sp
Camellia *Camellia sp*	Japanese cleyera *Cleyera japonica*	Sweetgale, Bog Myrtle *Myrica gale*
Chinese sweetspire *Itea virginica*	Japanese fatsia *Fatsia sp*	Tea olive, False holly *Osmanthus sp*
Crape myrtle *Lagerstroemia sp*	Japanese pittosporum *Pittosporum sp*	Viburnum *Viburnum* sp
Flowering quince *Chaenomeles sp*	Jasmine, Showy *Jasminum floridum*	
Forsythia *Forsythia sp*	Jasmine, Winter *Jasminum nudiflorum*	
Fothergilla, Large *Fothergilla major*	Leucothoe, Fetterbush *Leucothoe sp*	

Table 5. Undesirable species not to be planted on Maxwell AFB.

The following species are not to be planted on base for a variety of reasons. Some of the listed species can become invasive under favorable conditions, and tend to out-compete native species. Others are not drought-tolerant during Alabama's hot summers or are not well-suited to Maxwell's soil. Still others are toxic and can pose a risk to human health, especially in military family housing areas. Trees and shrubs that are prone to disease, have weak wood, or tend to have poor growth habits in our area are also discouraged. Fruit-bearing trees that may attract birds or wildlife near the airfield are prohibited.

In addition to the undesirable plants listed below, planting any invasive plants or noxious weeds is prohibited. Refer to the lists of invasive plants and noxious weeds at the following web sites:
Alabama Invasive Plant Council, http://www.se-eppc.org/alabama/
USDA NRCS, Alabama State-listed Noxious Weeds, http://plants.usda.gov/checklist.html

Undesirable Trees	
Acer sp. Maples	*Ostrya virginiana* Eastern Hop-Hornbeam
Ailanthus altissima Tree-of-heaven	*Paulownia tomentosa* Princesstree
Albizia julibrissin Silktree or Mimosa	*Phellodendron amurense* Amur Corktree
Cinnamomum camphora Camphor tree	*Poncirus trifoliate* Trifoliate orange or Hardy orange
Elaeagnus sp. Russian Olive	*Populus* sp. Poplars
Evodia danielli Korean Evodia	*Pyrus calleryana* Callery pear "Bradford"
Ginkgo biloba Ginkgo - Female trees prohibited	*Quercus acutissima* Sawtooth Oak
Halesia carolina Carolina silverbell	*Salix* sp. Willows
Kalopanax pictus Castor-aralia	*Triadica sebefera* Chinese Tallowtree
Malus sp. Apples, Crabapples	*Ulmus* Elms
Melia azedarach Chinaberry Tree	*Vernicia fordii* Tungoil tree
Morus sp. Mulberry	

Undesirable Shrubs
Berberis species (except variety with spines) Barberry
Bamboo species Bamboo – Spreading varieties prohibited
Cotoneaster species Cotoneaster
Elaeagnus sp. Thorny olive, Autumn olive
Gardenia sp. Gardenia
Ilex cornuta 'Rotunda' Rotunda variety, Holly
Ligustrum sp. privet
Lonicera species Honeysuckle
Nandina species Nandina
Pyracantha sp. Pyracantha, Scarlet firethorn
Taxus species Yew
Rosa multiflora Multiflora rose
Solanum viarum Tropical soda apple

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14. ABSTRACT
This document is an inventory and evaluation of the historic landscape features of Maxwell Air Force Base (AFB), Alabama. This document serves to meet the requirements for federal agencies to address their cultural resources, which are defined as any prehistoric or historic district, site, building, structure, or object. This report is especially relevant to Section 110 of the National Historic Preservation Act, which requires federal agencies to inventory and evaluate their cultural resources.

Maxwell AFB's historic development has resulted in several landscapes that are unique in their design and implementation. This report outlines the cultural influences that determined the physical layout and construction of Maxwell AFB, and then identifies several historic landscapes within the base. The report concludes with recommendations for the maintenance and preservation of the identified historic landscapes.

15. SUBJECT TERMS
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