

**Architectural Survey of Facility No. 2: A 1950s Hangar on
Martindale Army Aviation Support Facility, San Antonio,
Bexar County, Texas**

by
Jennifer L. Thompson



Technical Report, No. 2
Center for Archaeological Research
The University of Texas at San Antonio

Raymond P. Mauldin
Principle Investigator

prepared for

Cultural Resources Management Program
Adjutant General's Department
Texas Military Forces
Camp Mabry, Austin
P.O. Box 5218
Austin, Texas 78763-5218

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ABSTRACT

The Center for Archaeological Research (CAR) of The University of Texas at San Antonio conducted an architectural survey of the Texas Army National Guard Martindale Army Aviation Support Facility (AASF) in October 2006 for the Adjutant General's Department. No plans for construction on the facility were proposed. The work was set forth to examine a potentially historically significant building on the property and make recommendations regarding its historic preservation.

The property inventory included an architectural description, history, and National Register of Historic Places (NRHP) evaluation of a World War II-era hangar referred to as Facility No. 2. The history of Martindale AASF, the historic function of the building, the architecture, and modification of the original building are of particular interest to our NRHP assessment. CAR personnel conducted interviews and searched archival records at the airfield locating many photographs or architectural plans that aided our study of the building.

We were unable to determine the exact date of the hangar's construction but were able to place it within a likely range of years after the end of World War II when the facility was transferred from the United States government to the Texas Army National Guard. The hangar has seen two stages of building additions to the northern and southern façades. Prior to these additions, an explosion destroyed offices and storage rooms of the southern annex. These rooms were repaired prior to the construction of the additions in a manner in keeping with the original plans.

With historic photographs, architectural plans, and an interview with Luis Alvarado, Chief Warrant Officer 5, we were able to piece together a history of the Martindale airfield and building sequence of the hangar. The archival records found at the Martindale airfield were returned to the Operations Building there. Digital copies of these records are on file at the Texas Forces Museum at Camp Mabry, Austin.

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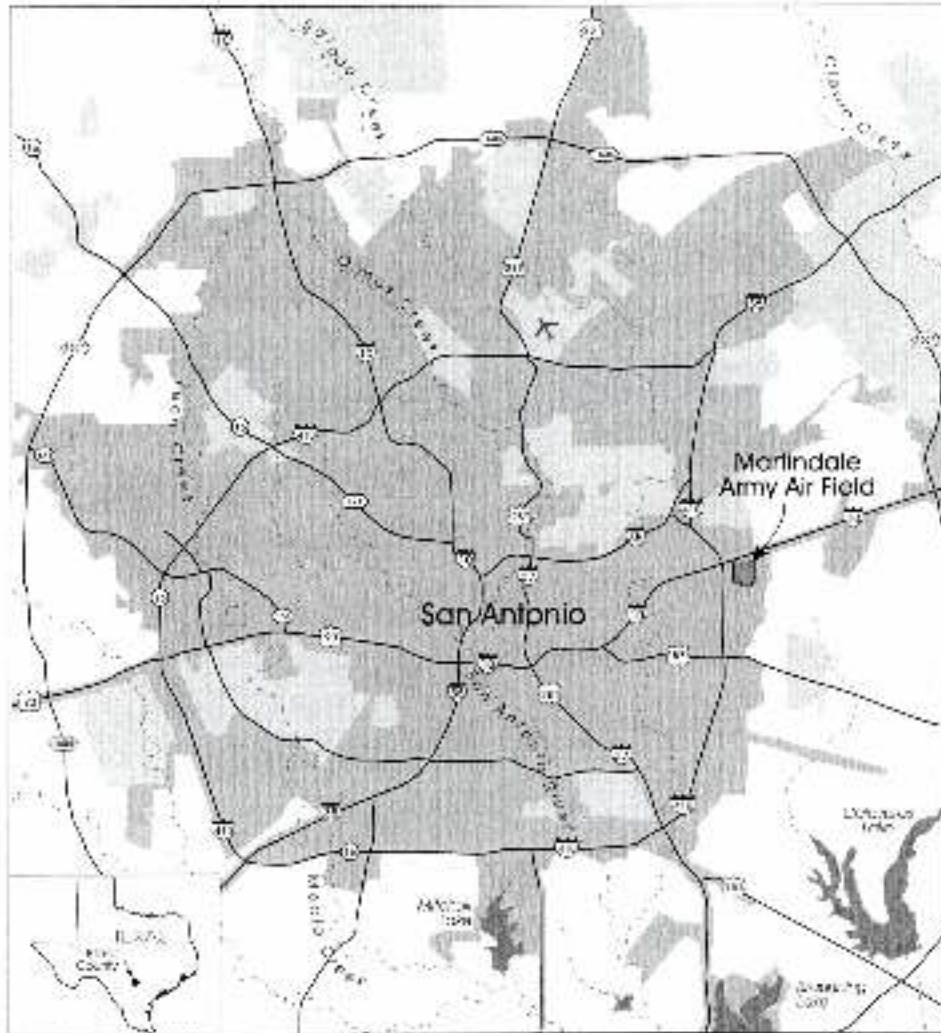


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Figure 3-3. A photograph dated 1957 shows both an L1 plow and OH 23 helicopter parked near temporary hangars at Martindale field.



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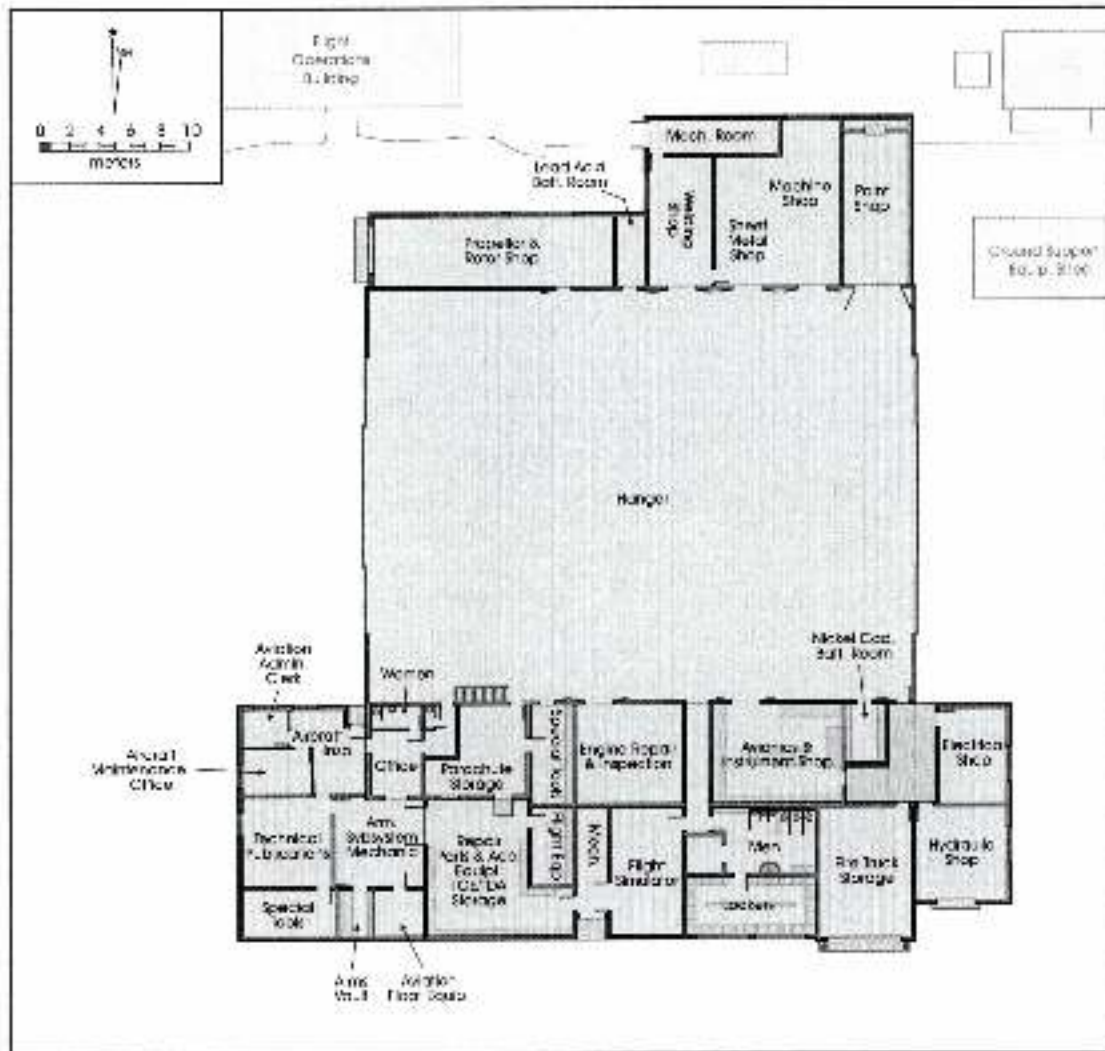


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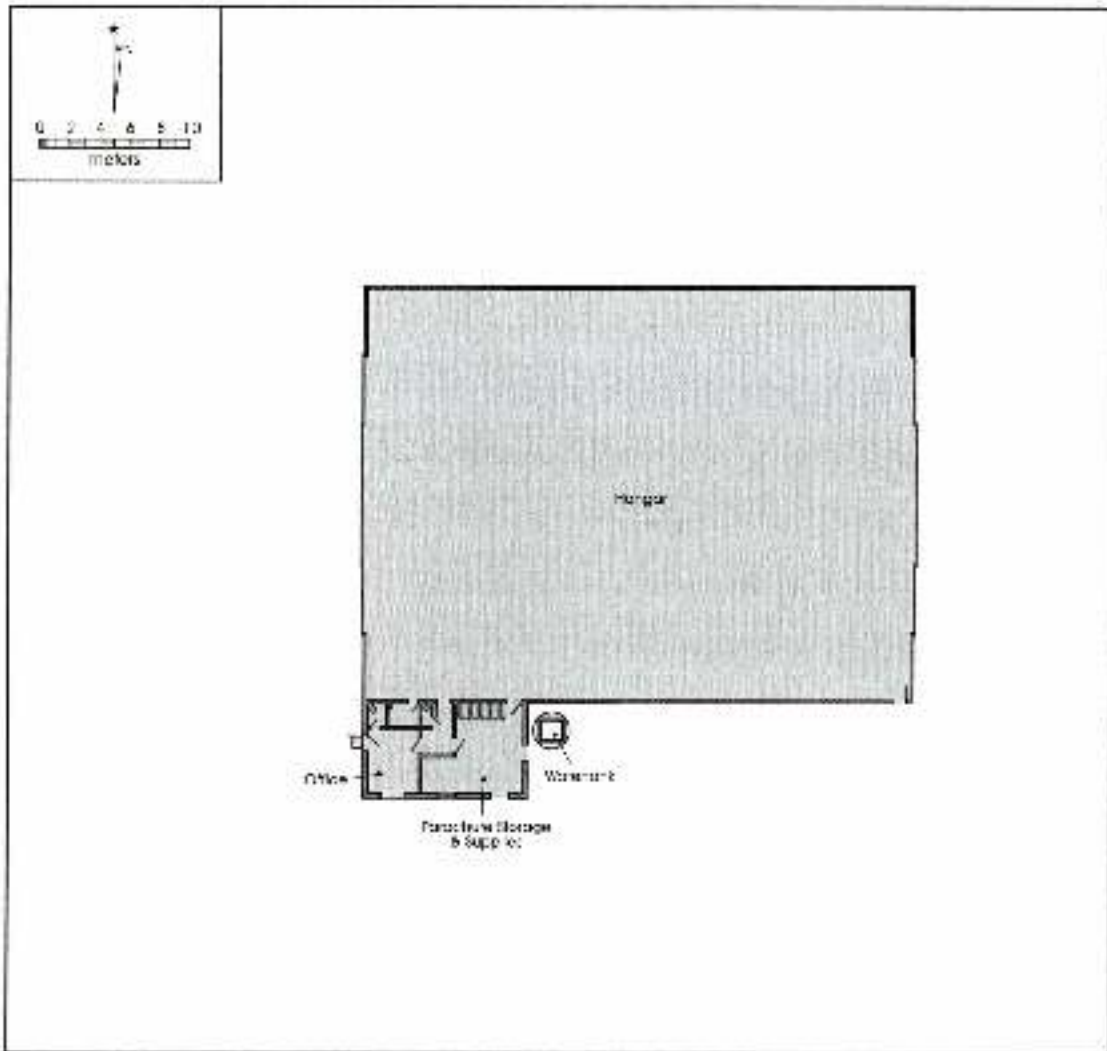


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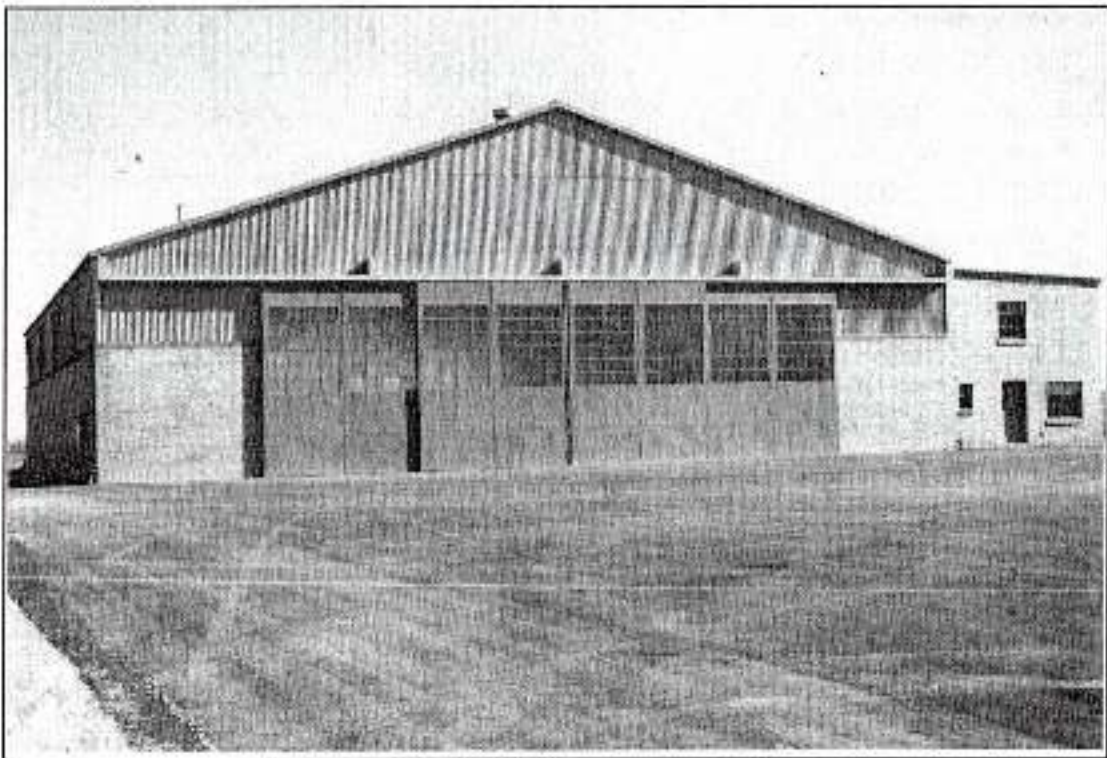


Figure 4-3. 1950s-era photograph of the finished hangar, western façade.



Figure 4-4. Hangar interior detail of windows.



Figure 4-5. Aerial view of the hangar post-1961, facing east. Note southern annex (the site of the explosion in 1961), and the skylights in the original roof.



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The Center for Archaeological Research would like to thank the men and women of the Texas Army National Guard at the Martindale AASF for their hospitality during our study of their facility. Chief Warrant Officer 3 Xavier Gudino, the Operations Manager at Martindale allowed us access to the hangar, offices, grounds, and documents important to this study. Mr. Luis Alvarado, Chief Warrant Officer 5, took time to lead a tour of the facility while sharing memories of his service at Martindale. He also offered his knowledge of architectural illustrations and reviewed the historic building plans and photographs with us. Theresa de la Garza Carwise and Kristen Wenzel of the Cultural Resources Management Program in the Adjutant General's Department facilitated contact between the Martindale facility and CAR, and provided us with the original deed and informant's names. Tina Burford of the Texas Military Facilities Commission provided historical information on the property inventory. Sue Ann Pemberton provided comments on the architectural analysis of this study. The author would also like to thank Bruce Moses for drafting the report figures and Cynthia M. Munoz for editing the final manuscript.

CHAPTER 1: INTRODUCTION

The Center for Archaeological Research of The University of Texas at San Antonio conducted an architectural inventory and evaluation of the Army National Guard Martindale Army Aviation Support Facility located in Bexar County, Texas in October 2006 for the Adjutant General's Department (Figure 1-1). The inventory included an architectural description, history, and National Register of Historic Places (NRHP) evaluation of what was thought to be a World War II-era hangar referred to as Building No. 2. The history of Martindale airfield, the historic function of the hangar, its architecture, and modification of the original building are of particular importance to our NRHP assessment. CAR personnel conducted interviews and searched archival records at the airfield to locate any photographs or architectural plans that would aid the study of the building. Digital copies of the documents and photographs found are on file at the Texas Military Forces Museum at Camp Mabry in Austin for permanent curation. All original documents were returned to the Martindale facility. Some of these materials were reproduced for this report. Historic photographs of the hangar's construction are found in Appendices A-C. Historic newspaper articles relating to Martindale ASSF are in Appendix D.

The Martindale Army Aviation Support Facility was historically used to train flight instructors during World War II. Today, the facility supports the Texas Army National Guard, Aviation Unit, which serves the State of Texas responding to natural disasters and the United States government in the current war in Iraq. The airfield has four main structures: an Operations Building, an Armory, a garage, and a hangar (Figure 1-2). This complex of buildings sits on the northern half of the property. Runways, overgrown since helicopters replaced airplanes, cross the eastern side of the property running north to south. A large parking area lies on the northwest side south of the hangar. The rest of the property is an open plowed field. Though the runways were in use beginning in 1944, the hangar is the only structure at the facility at least 50 years old (Figure 1-3). The age of the hangar remains unknown, but it may date to the post-World War II era. The second oldest structure, the armory, was dedicated in 1960-1961, and served as the operations building until a new operations building was built in 1981. The garage for helicopter storage was constructed in 2004.

CHAPTER 2: METHODOLOGY

To place the hangar in historical context, CAR personnel conducted archival research and interviews with individuals who had worked at Martindale. Historic plans and photographs were located at the facility and Mr. Luis Alvarado assisted CAR with determining the subjects of the unlabeled photographs and spoke with us at length about his service as Operations Manager at the airfield. The architectural and mechanical drawing allowed us to determine the original building schematics and construction materials used as well as the building sequence of the additions. Such plans, when compared to the current building, reveal how much of the historic integrity of the building has been compromised by construction.

Photographs were taken of each façade of the hangar, detailing both the historic and non-historic additions. Photographs inside also detail older and newer portions of the offices attached to the hangar. Other primary documents such as deeds, military records, and newspaper articles outlined the historic use of the building and its chain of ownership.

Our findings of the architectural elements and the historic context were then evaluated according to the four Criteria used to determine National Register of Historic Places eligibility (Millbrooke et al. 1998). These are:

Criterion A: This includes properties associated with events that have made a significant contribution to the broad patterns of our history. As this applies to aviation, properties associated with air exploration, transportation of airmail or manned flight are listed on the NRHP (Millbrooke et al. 1998).

Criterion B: Properties that are associated with the lives of persons significant in our past may be included on the NRHP. Individuals significant to aviation history could be pilots, engineers, or military officials among others. Howard Hughes' "Flying Boat" is listed for its association with him (Millbrooke et al. 1998).

Criterion C: This criterion applies to architectural or engineering properties that embody the distinctive characteristics of a type, period, or method of construction. This also applies to the work of a master architect or artisan. Aircraft or air-related facilities can be eligible if they demonstrate distinctive construction. Bryce Canyon Airport Hangar in Utah is listed for its use of vernacular construction in the use of sawn-log and corrugated-tin features (Millbrooke et al. 1998).

Criterion D: This is usually applied to archaeological properties where sites may yield or potentially yield information important in prehistory or history. Rare aircraft with little or no surviving documentation, aviation wrecks, and ruins of aviation facilities could qualify for listing in the NRHP under this Criterion (Millbrooke et al. 1998).

CHAPTER 3: HISTORICAL CONTEXT

Brief History of Aviation during World War II

In the years prior to the United States' involvement in World War II, the United States Army Air Corps (USAAC) trained minimal numbers of pilots compared to the rapidly growing Luftwaffe, the German air force. While the Germans had a million men trained and ready to serve, the USAAC had only 2,000 officers and 2,000 enlisted men in 1939 (Cook 2001:44). Once the United States understood the implications of such a disparity, it began building planes and training pilots at unprecedented rates, tripling the size of the USAAC between 1940 and 1941. Initial primary training occurred at nine civilian schools across the country. San Antonio had several airfields that historically served as flight schools and remained important to the aviation boom during the war. Randolph Field performed basic flight training and served as headquarters for the Air Corps Training Center. Advanced flight training occurred at Kelly Field with Brooks Field activated as a substation of Kelly. The War Department announced a new Pilot Training Mission with a goal of 4,500 pilots by 1939. This goal was further accelerated to 7,000 per year by 1941. In 1941, the United States recognized the Army Air Corps as the Army Air Forces, a division equal to the Army Ground Forces. The pilot training goal increased rapidly after the attack on Pearl Harbor training 102,000 pilots in 1942. Though flight schools expanded across the country, Randolph Field continued to be the largest basic training school in the United States. In 1943, Randolph's mission to train pilots ended to make its resources available for the Central Instructors School in order to train all the flying instructors for all the Army flying schools in the United States (Cook 2001:45-47).

History of the Martindale Airfield

In this context of a rapidly expanding air power, the United States government acquired the property known as Martindale AASF, with other small airfields, as a support facility to Randolph Field during World War II. Mrs. Ethel Martindale Calhoun, the property's namesake, sold some properties, including a tract referred to as Martindale Airfield, to the United States government for ten dollars in 1944 (Bexar County Clerk 2006). However, the United States Army was already using the Martindale property as one of many small airfields in support of the Randolph Army Air Corps facility for pilot training as is apparent in a article in the Dallas Morning News. The article reported an accident occurred at Martindale airfield killing an Air Corps instructor and cadet while "practicing landings and take-offs in a three plane formation" (Dallas Morning News [DMN], 27 January 1942:4). Randolph Field relied on hundreds of support airfields like the one at Martindale during World War II (Jody Cook, personal communication 2006).

After World War II, the Air Force no longer needed the extra runways and agreed to allow the Texas National Guard, the Air National Guard, and the Civil Air Patrol to use the Martindale tract. It stayed in the possession of the federal government until 1954 when the *Dallas Morning News* reported the state acquired the “218-acre Martindale auxiliary field, one time used by Randolph Field” (DMN, 9 August 1954:8).

The Texas Army National Guard Aviation unit used the airfield to fly reconnaissance missions in L1 liaison aircraft into the late 1950s (Figure 3-1). OH-23 helicopters gradually replaced the airplanes (Figure 3-2). These helicopters were designed for utility, observation, and MedEvac during the Korean War. A photograph dated 1957 shows both an L1 plane and an OH-23 helicopter parked near temporary hangars at Martindale airfield (Figure 3-3). As helicopters became more common at Martindale, the number of emergency fire and rescue missions conducted there increased, since helicopters have more versatility and larger carrying capacity than airplanes. Today, pilots at Martindale fly UH-60 Blackhawk helicopters.

Currently, a small staff works full time to maintain the aircraft in addition to serving their monthly and yearly Texas Army National Guard duties. Their primary mission has been to provide emergency support in natural disasters. Since the early 1990s, the long Texas drought has increased forest and grass fires to a degree beyond what Texas communities can fight alone. These communities have come to rely on the Texas Army National Guard to put out these fires. A crew at Martindale is always on call to fight fires in Texas. During hurricane season, another crew is always standing by to help areas hit by hurricanes. Though the Texas Army National Guard stands by to respond at the governor’s instruction to serve the State of Texas in any capacity the governor finds appropriate, they have also been called out of state and country to serve. Pilots from Martindale were the first to arrive in New Orleans the day after Hurricane Katrina hit in 2005 and began a long arduous rescue mission there (Luis Alvarado, personal communication 2006). In recent weeks, most of the units at Martindale have been called to serve in the current war with Iraq. These men and women fly in supplies, transport ground troops into combat, and MedEvac the injured to hospitals.

History of the Martindale AASF Hangar (Facility No. 2)

Primary documents were integral to determining the government agency for which the hangar was constructed and aided in estimating the age of the hangar. Photographs, newspaper articles, construction plans, and informant interviews brought to light building phases of the hangar as well as aided in understanding its use post-World War II. Though the date of construction is unknown, the date of

construction can be narrowed to sometime between 1954 and 1961 from primary documentary evidence.

In 1954, after the property was sold to the State of Texas, Martindale ASSF came under sole control of the Texas Military Facilities Commission for use by the Texas Army National Guard. At that time, the Texas Military Facilities Commission conducted an inventory of the property (Texas National Guard 1954). One 10-x-30 ft. storage shelter, one watertank, fencing, and roads were noted. A 1950s construction date is further supported from photographs taken in 1957 and newspaper articles discussing events concerning the hangar.

Stamped photographs indicate that the hangar at Martindale ASSF was likely built for use by the Texas National Guard, rather than the United States Army. These photographs indicate a Texas Army National Guardsman Sgt. Joe T. Elsis was the photographer during the construction of the hangar (Figure 3-4). Unfortunately, these photographs are not dated. The only dated photograph (1957) in the group also supports the inventory document that suggests the hangar was built by the Texas National Guard rather than the U.S. Army. Though the picture did not capture the hangar in question, the photograph shows L1 planes, OH-23 helicopters, and temporary hangars all used by the National Guard at Martindale (Figure 3-3). The modern hangar likely replaced temporary hangars used by the Texas National Guard, which would probably have needed the upgrade to a permanent hangar designed for maintenance (Luis Alvarado, personal communication 2006).

Newspaper articles suggest that the hangar could have been constructed as early as 1954 but no later than 1961. In an article about monies appropriated for National Guard Armories, the *Dallas Morning News* mentioned the Army had non-armory National Guard projects planned at a number of facilities including "Martindale Field, San Antonio" (DMN, 19 April 1954:5). Monies for the Armory were received in 1959 (Baskin 1959:13; Figure D5). This article could refer to construction plans for the hangar because there are no other permanent buildings at the Martindale airfield built earlier than this, though monies for runway maintenance are another possibility. Another article from the *Dallas Morning News* described an explosion that occurred at an "NG Field" in 1961 referring to the Martindale Field (DMN, 20 September 1961:Section 4:3). The only reported explosion at Martindale occurred in the offices attached to the hangar (Luis Alvarado, personal communication 2006), so we know the hangar was constructed prior to the date of the explosion.

Today, the permanent hangar is still used for aircraft maintenance by the Texas Army National Guard but instead of airplanes, Martindale pilots now fly Blackhawk helicopters. Where the hangar once held 10 L1 planes, it now barely holds two Blackhawk helicopters. Other, newer structures at Martindale house

helicopters, but the hangar is the only structure equipped for maintenance operations. Mechanics use the hangar to perform scheduled maintenance of the aircraft. Flight crews also prepare the helicopters for their missions inside the hangar, loading and unloading them with a large hoist mounted to a steel frame.

CHAPTER 4: MARTINDALE AASF, FACILITY NO. 2 ARCHITECTURAL

DESCRIPTION

The hangar at Martindale AASF, referred to as Facility No. 2 is one of several buildings on the property though the only building included in this study. The hangar is built on an east-west axis, just south of the Operations Building and east of the Armory. A garage for helicopter storage stands a few meters to the southwest.

The hangar has seen four construction phases to date (Figure 4-1). The date of the original construction is estimated to have occurred between 1954 and 1961 and is well documented in photographs (Appendix A). As-built plans for the hangar are undated but do list a date of revision in 1955. Repairs to the offices attached to the hangar happened after an explosion occurred between 1961 and 1975 (Appendix B). A 1975 addition occurred on the north and south sides of the hangar, and a 1980 addition occurred at the southwest and southeast corners of the structure.

Copies of the architectural as-built plans of the original hangar indicate Lance Engineering Co. in El Paso, Texas designed the hangar. O. Paul Lance served as the Engineer and William G. Wuchmann served as the Associate Architect (seal No. 284). As designed originally, the hangar included a large, rectangular garage (120 ft-x-90 ft 8 in) with a double-height interior space for aircraft maintenance and a two-story masonry office space and storage space (35 ft.-x-20 ft.) attached to the south side of the hangar (Figures 4-2 and 4-3).

Structurally, the hangar remains sound, sitting on a concrete foundation with a steel frame consisting of I-beams that support angle iron gable trusses. This allows for a large, uninterrupted floor space with a high ceiling clearance suitable for aircraft maintenance. The lower two-thirds of the walls are load-bearing masonry made of brick. The main garage has fourteen (seven pair) large industrial windows with twenty panes each. Center panels of four panes in each of these are steel pivoted windows (Figure 4-4). Three pairs are in the north wall, four pairs in the south wall. Above the brick and on the gable ends, the walls were covered with corrugated asbestos siding (transite), since replaced with metal r-panels and batt insulation secured with chicken wire. The main hangar originally had a corrugated metal, gable roof with sixteen corrugated translucent plastic skylights and three round roof vents (Figure 4-5; additional aerial photographs are in Appendix C). Since then, the roof has been replaced with R-panel roofing and four linear roof monitor vents at the ridge, more efficient materials to control extreme summer heat. Batt insulation secured with chicken wire is in place between the roof and the steel frame. Two large 15-x-18 ft. steel, sliding track doors are present at the east and west ends of the hangar, with two steel divided

multi-light windows in the top half of each door (Figures 4-6 and 4-7). An exterior door measuring 3-x-6 ft. is in place at the southeastern corner of the hangar.

The inside of the hangar has exposed trusses, columns, and beams visible in all parts of the hangar. The upper level of the hangar is accessed by metal stairs at the west end of the south wall. A large hoist is attached to the floor, updated with a modern Gaffey hoist, which is more versatile than the hoist it replaced in 1991. The Gaffey hoist is attached to a large steel frame that allows the hook to track along two sides of the hangar to load and unload helicopters (Figure 4-8). The previous hook had less mobility and could only move along one wall of the hangar. Because the helicopters' rotor blades prevent parking as close to the wall as the airplanes could, the older hoist was replaced with this more efficient hoist that could load equipment on a helicopter parked in the center of the hangar.

The office and storage space off the south end of the hangar was also built of solid masonry walls of structural clay tile and a brick veneer with a low-slope roof. This portion of the building is not quite as tall as the hangar. The area is two-story and measures 86 ft.-x-20 ft. 7 in. The original drawings show these rooms were planned for parachute storage, an office, latrine, and janitor's closet (Figure 4-2). The western façade possesses a wood and glass panel door flanked by two multi-light windows. A central window is over this door looking west from the second story. Three additional windows face south and one window faces east from the first floor. This window fenestration is replicated on the second floor with one central window looking west, three facing south, and one facing east.

On Tuesday, September 19, 1961, an explosion occurred in this annex of the hangar injuring six people. Photographs documenting the cleanup efforts show that although the office complex was demolished, the hangar appears to have remained intact (Figure 4-9). These original rooms were restored sometime prior to 1975, when the first additions were added. All the restoration and the additions were built with brick matching the original hangar.

Exterior Description of the Additions

Two non-historic additions were made in the mid 1970s and 1980. Both the additions are single story with flat roofs. All walls of the additions are clad in brick with metal fascia. Steel frame windows in the additions vary from small ribbon windows to large, multi-light windows on all facades. Exterior doors provide access to the building in various locations. The Fire Truck Storage, the Propeller and Rotor Shop, and the Hydraulic Shop all have exterior overhead doors.

Circa 1975 Addition

CAR could not locate the original architectural plans for this phase of additions but was able to locate the mechanical plans, which were dated March 1975 (Figure 4-10). The dimensions of the 1975 addition were measured from plans for a second addition dated 1976 because the mechanical plans did not show measurements or architectural features. The southern addition was built around the restored rooms that were destroyed in the explosion. This measures 122-x-53 ft. including some offsets for the existing offices and a covered porch (Figure 4-11). When this addition was built, the exterior windows of the restored offices were left in place and are still visible today (Figure 4-12). We can get some idea of the purpose of the rooms from plans of later additions that note "existing" rooms. Besides the covered porch and entry, two of the rooms were described as an avionics shop and a "NI CAD" battery room. Floor plans dated October 11, 2002 show other rooms in this addition were used for fire truck storage, engine repair and inspection, a mechanical room, a flight simulator, and men's locker room.

The northern 1975 addition measures 129-x-37 ft. (with one offset) and includes six rooms (Figure 4-13). It is slightly longer than the southern addition because it is the same length as the hangar, where the southern addition is not. An overhead door was installed in the western wall of the northern addition to access the propeller and rotor shop (Figure 4-14). The 2002 floor plan shows the other rooms functioned as a lead acid battery room, a welding shop, a paint shop, a mechanics room, and a machine/sheet metal shop. All these shops open onto the hangar except the mechanics room. The function of the rooms in these additions change as the needs of the facility change, but their general purpose remains the same: offices, storage, and maintenance.

Circa 1980 Addition

Plans were drawn for more improvements in 1976, though construction was not finished until 1980 (Luis Alvarado, personal communication 2006). These additions are shown in Figure 4-15. At this time, the airfield operations moved from the armory (dedicated in 1960-61) to a new Operations Building. At the same time, a Ground Support Equipment Shed was constructed at the northeast corner of the hangar. This shed is unattached. A small, two-room attached addition was also constructed at the southeast corner and measures 20 ft. 8 in.-x-43 ft. 8 in. (Figure 4-16). At the time, these rooms were designed as an Electrical Shop and a Hydraulic Shop.

At the southwest corner of the hangar, the final addition wraps around the area where the explosion occurred (Figure 4-17). This measures 51 ft. 1 in.-x-40 ft. 4 in., including the offsets. Plans show three rooms which function as offices for the aviation administration clerk, the aircraft maintenance officer, and the aircraft inspectors. The other five rooms were designed for the Tech Publications, Armament

Subsystem Mechanic, special tools, avionics equipment, and the arms vault.

The hangar at Martindale ASSF was constructed between 1954 and 1961 to fit the needs of a changing Texas Army National Guard. Over the decades since it was built, the hangar has seen further improvements to the building with two additions added as needed to support the missions of the TXANG. The two additions house offices, maintenance rooms, and storage rooms off the north and south ends of the hangar, while the actual hangar floorplan remains intact.

CHAPTER 5: NRHP ASSESSMENT AND RECOMMENDATIONS

The Keeper of the National Register of Historic Places recognizes the importance of aviation to the history of the United States. The register lists many aviation properties including aircraft, public terminals, military installations, and support facilities (Millbrooke et al. 1998). During the course of this study, CAR found historical documentation relating to two historic properties: an airplane hangar and the airfield on which it sits. The history and NRHP assessment of the airfield is beyond the scope of this project. Further historical research is necessary to determine the significance of the World War II-era airfield and its association with Randolph Field; however, its historic look has changed with the construction of several buildings.

We are unable to confirm that the hangar itself was associated with the US government's expansion of air power during World War II and therefore cannot recommend the property's eligibility under Criterion A. We found no individual who remembers the date of construction and found no documents listing the date of construction. Some primary documents suggest the hangar construction likely occurred after the war between 1954 and 1961, after the State of Texas bought the property, barely reaching the minimum age for NRHP eligibility.

Assuming the hangar meets the age requirements, it does not meet minimum NRHP qualifications under Criterion C for properties that exhibit distinctive architecture, outstanding examples of style or construction, or the work of a master architect. Additions and updated materials have compromised the historic integrity of the exterior of the hangar. Though the doors are original, the roof and transite siding have been replaced. Two non-historic additions were added to the northern and southern faces. Inside, a bright yellow modern Gaffey hoist, installed during the 1990s dominates the hangar's appearance. When the explosion destroyed the original office and storage rooms in 1961, the restoration appears to have matched the original construction, both in floor plan and exterior construction materials. However, the additions made during the 1970s and 1980s did change the historic look of the annex despite the matching brick. Exceptional architectural examples of military aircraft hangars listed on the NRIIP are at Brooks Field and Randolph Field.

No historic information was found on the architect William G. Wuchmann or the Lance Engineering Company listed on the hangar's architectural plans. Because we found no biographies or other important examples of their work, their contribution to the NRIIP eligibility of this building under Criterion B remains unknown.

RECOMMENDATIONS

During CAR's historical and architectural study of the Martindale AASP, we found no properties eligible for listing on the NRHP and found no reason to limit any alterations to the property. Specifically, our recommendation refers to a post-World War II hangar (Facility No. 2) used today by the Texas Army National Guard, Aviation Unit.

Because the hangar does not meet the minimum requirements for listing on the NRHP, we do not recommend limiting any planned modification to the building. Other additions and improvements to both in the interior and exterior have changed the historic integrity of the building.

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Dallas Morning News (DMN) [Dallas, Texas]

- 1942 "Cadet, Flier Die at Practice of Landings." 27 January 1942:4. Dallas, Texas.
- 1954 "Army Seeks \$367,000 for Dallas Center." 19 April: Part 1:5. Dallas, Texas.
- 1954 "State Would Get Two U.S. Tracts." 9 August: Part II:8. Dallas, Texas.
- 1961 "Blast Hurts 6 At NG Field." 20 September 1961:Section 4:3. Dallas, Texas.

Texas National Guard

- 1954 "Joint Inventory and Survey of Condition of Premises: Martindale Auxiliary Airfield, Texas." Document on file, Texas Military Facilities Commission, Austin, Texas.

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- 1998 *National Register Bulletin Guidelines for Evaluating and Registering and Documenting Aviation Properties*. U.S. Department of the Interior, National Park Service.

APPENDIX A:

PHOTOGRAPHS OF HANGAR CONSTRUCTION

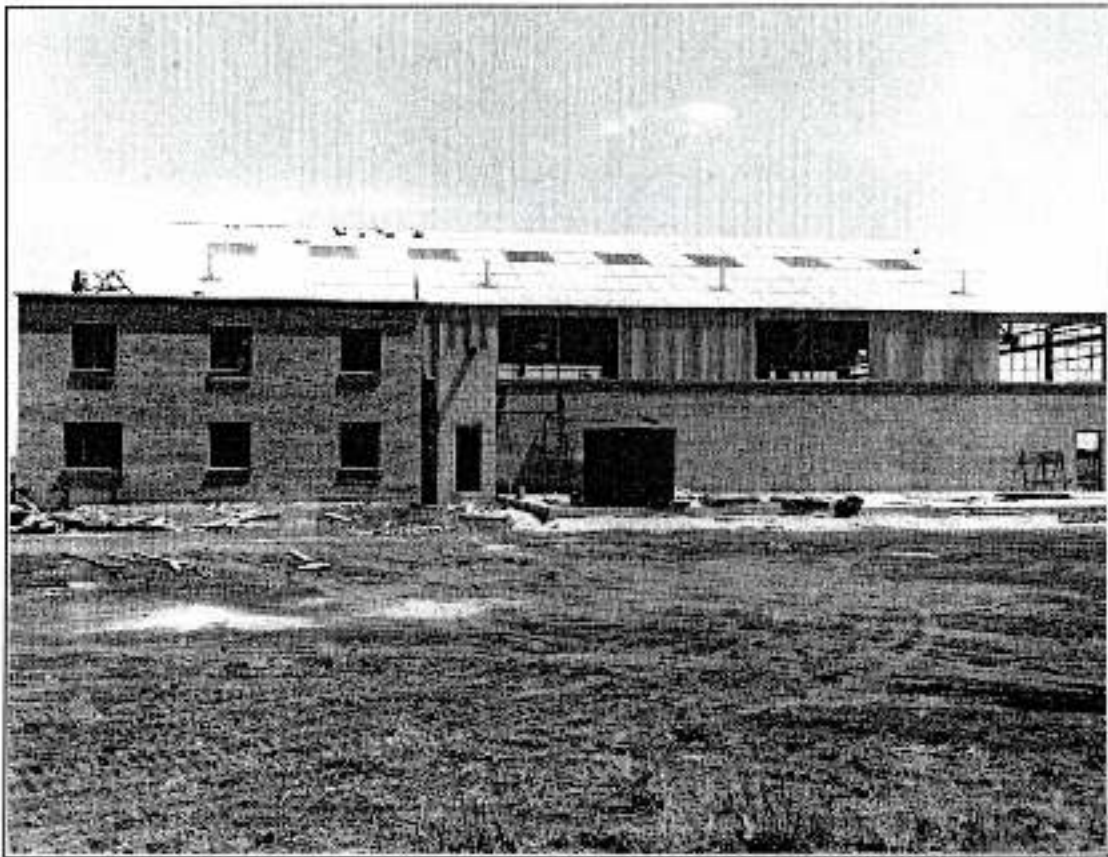


Figure A1. *Construction of Hangar, photographed by Sgt. J. T. Elais, ANG Photo Lab, Kelly AFB, Texas.*

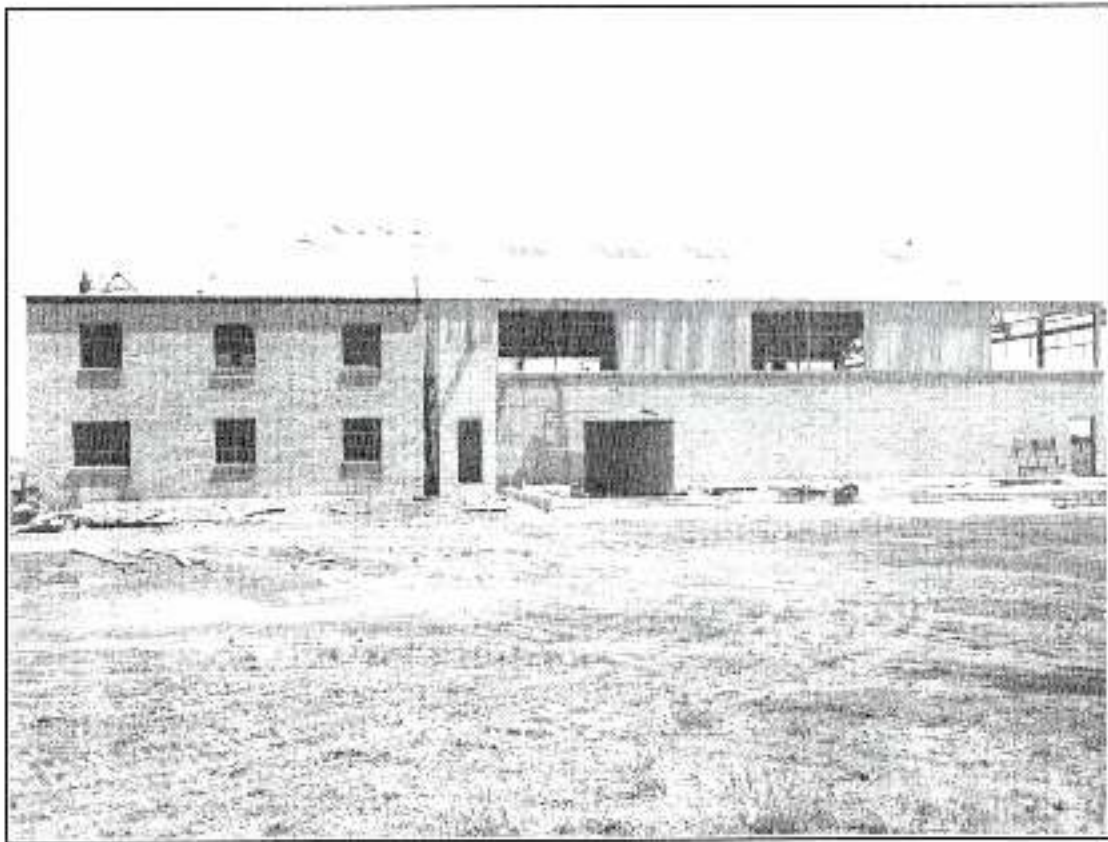


Figure A2. *Construction of Hangar, photographed by Sgt J. T. Elsis, ANG Photo Lab, Kelly AFB, Texas.*

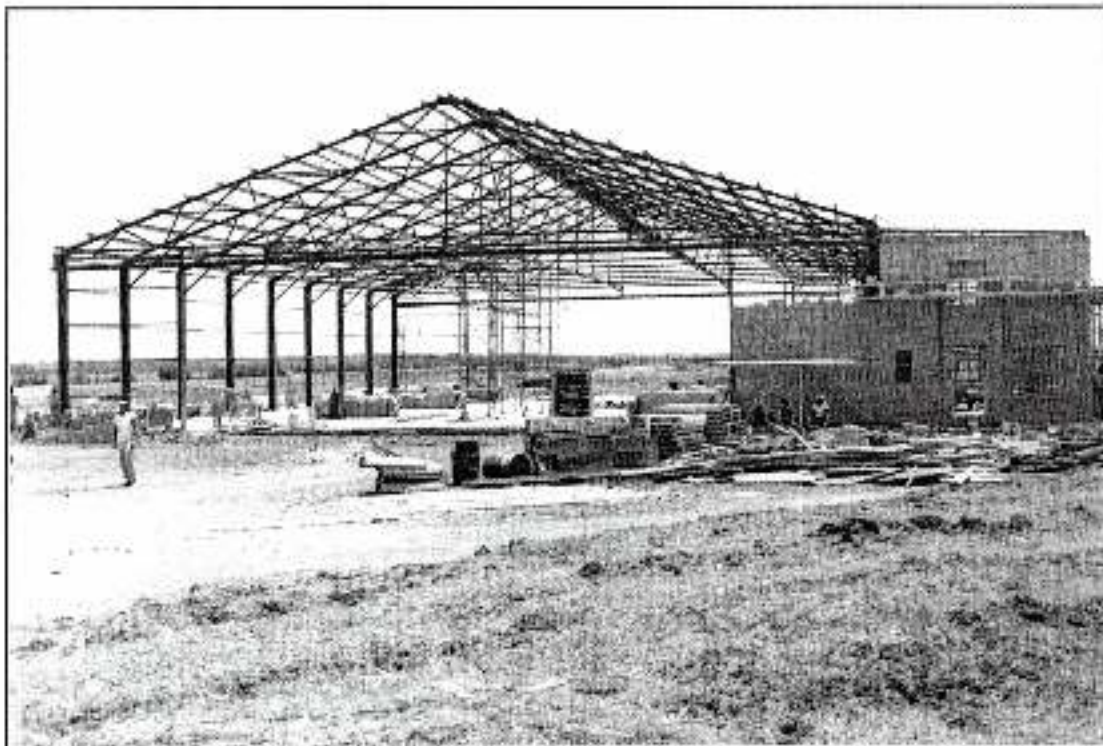


Figure A3. Construction of Hangar; photographed by Sgt J. T. Elsis, ANG Photo Lab, Kelly AFB, Texas.

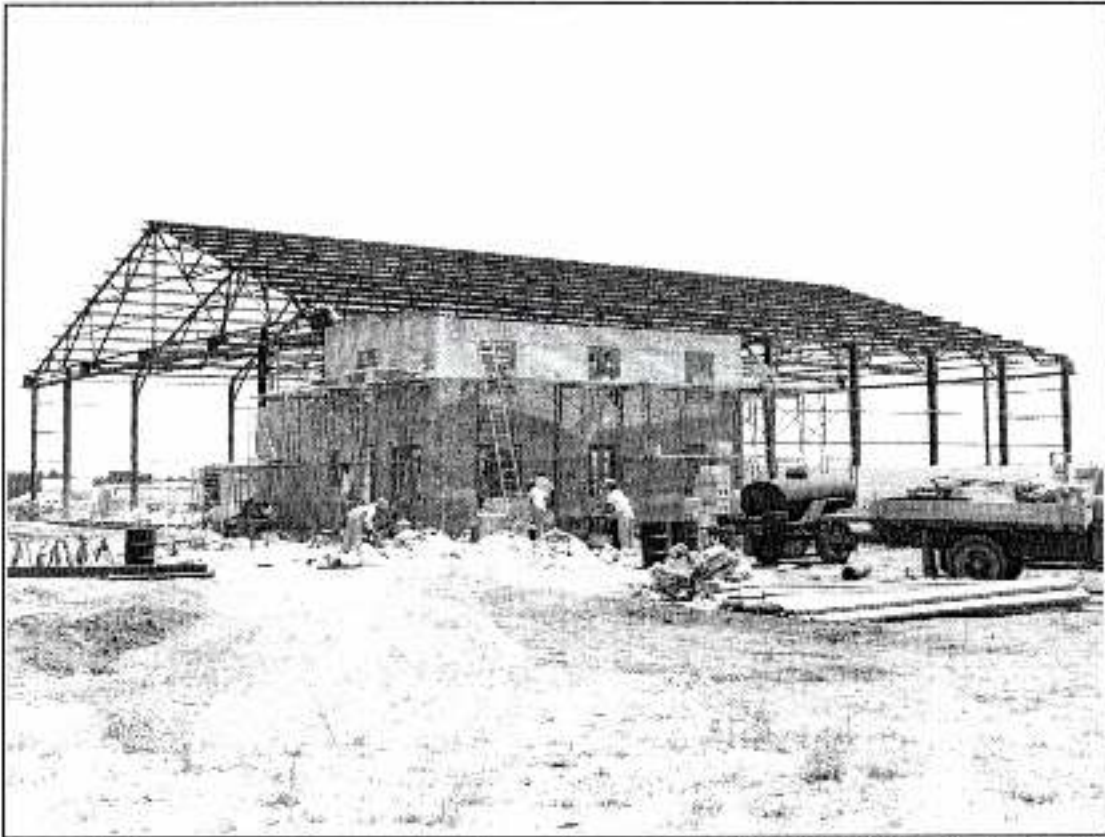


Figure A4. Construction of Hangar offices where explosion occurred in 1961. Photographed by Sgt J. L. Elsis, Aeg Photo lab, Kelly AFB, Texas.

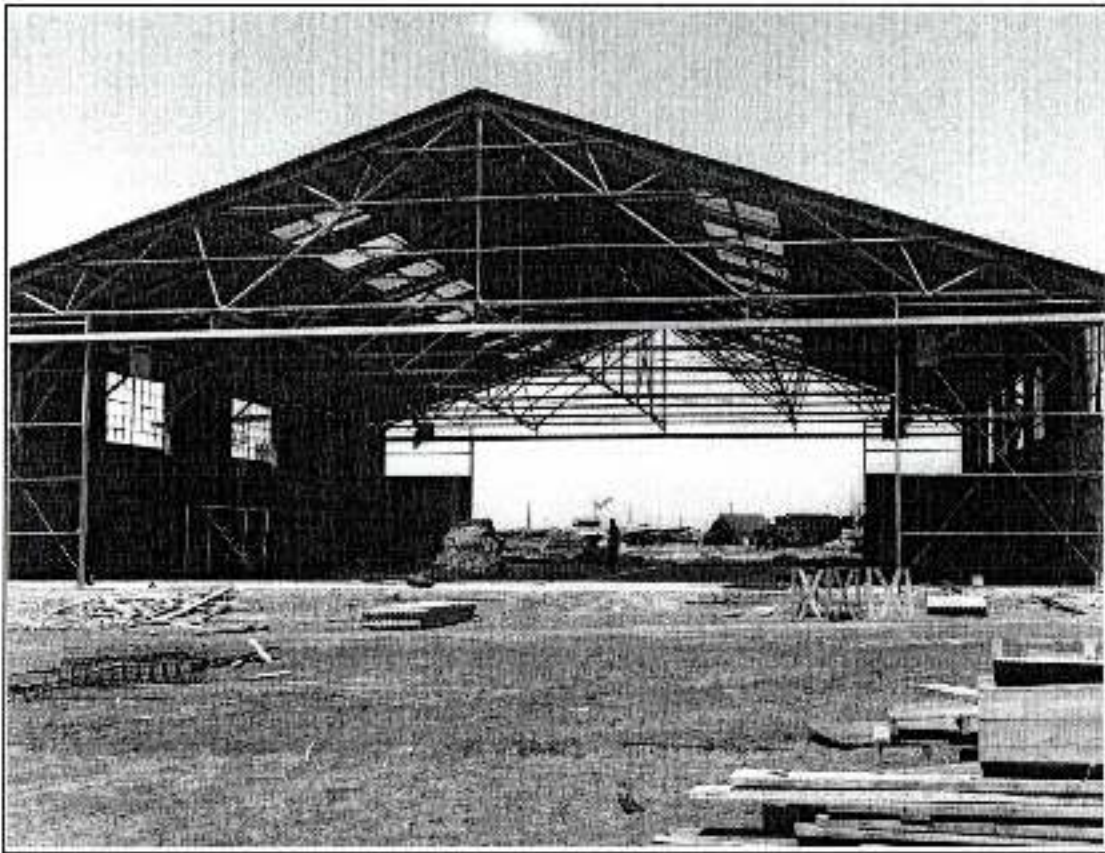


Figure A5. *Construction of Hangar, photographed by Sgt. J. T. Elsis, ANG Photo Lab, Kelly AFB, Texas.*



Figure A6. *Construction of Hangar, photographed by Sgt J. T. Elsis, ANG Photo Lab, Kelly AFB, Texas*
Site of explosion, left.

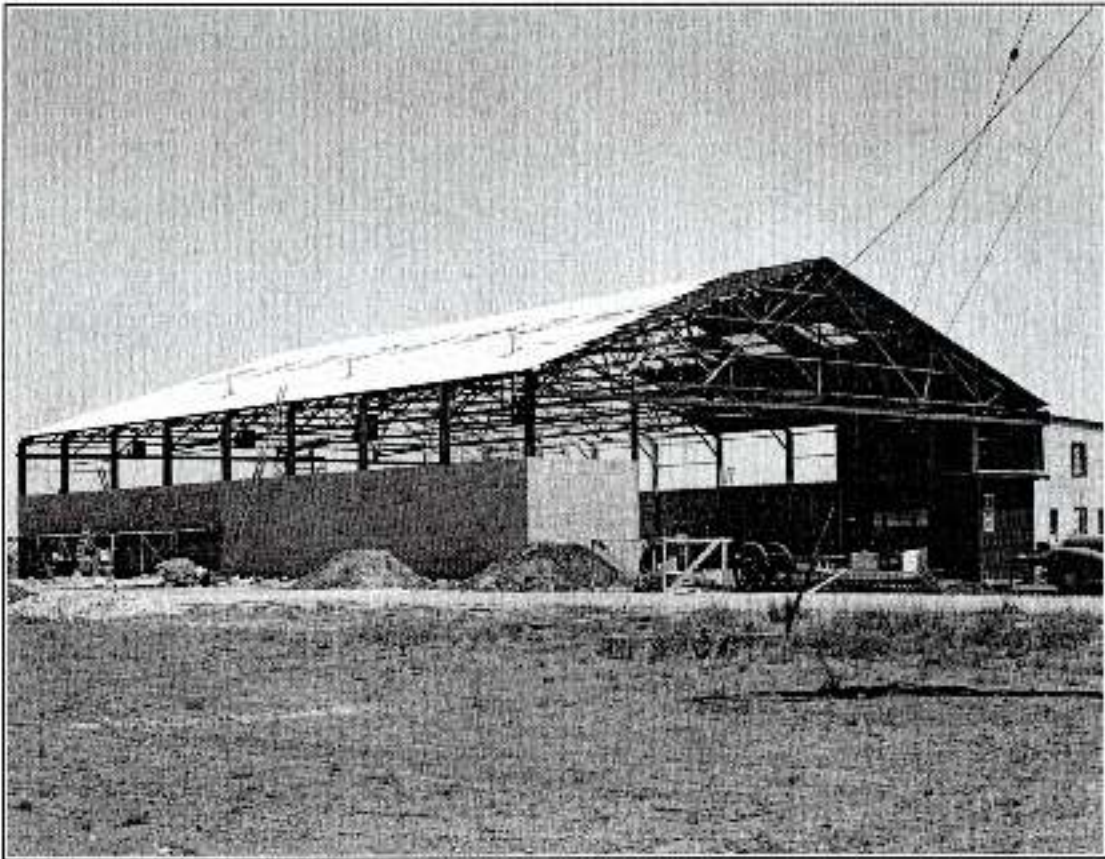


Figure A7. *Construction of Hangar, photographed by Sgt J. T. Elsis, ANG Phot Lab, Kelly AFB, Texas.*

APPENDIX B:

PHOTOGRAPHS OF CLEANUP EFFORTS AFTER THE EXPLOSION IN 1961

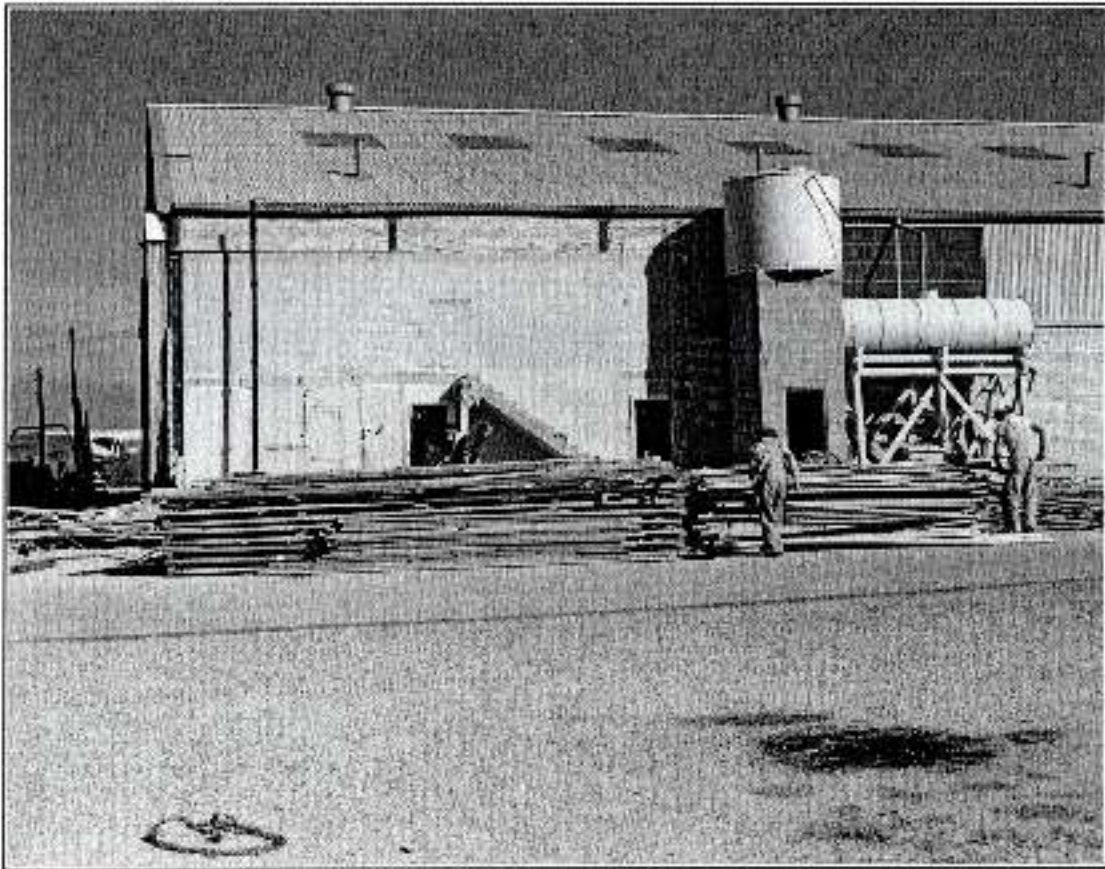


Figure B1. 1961 explosion cleanup, photographed by Sgt. J. T. Elsis. ANG Photo Lab, Kelly AFB, Texas.

APPENDIX C:

AERIAL PHOTOGRAPHS OF MARTINDALE FACILITY NO. 2 (HANGAR)



Figure C1. Aerial of Martindale Airfield showing Armory (left) and Hangar (right), view southeast. (Official Photograph Air National Guard Group 149th Fight Group, Kelly AFB, Texas. NEG #TANG 13 13 6).

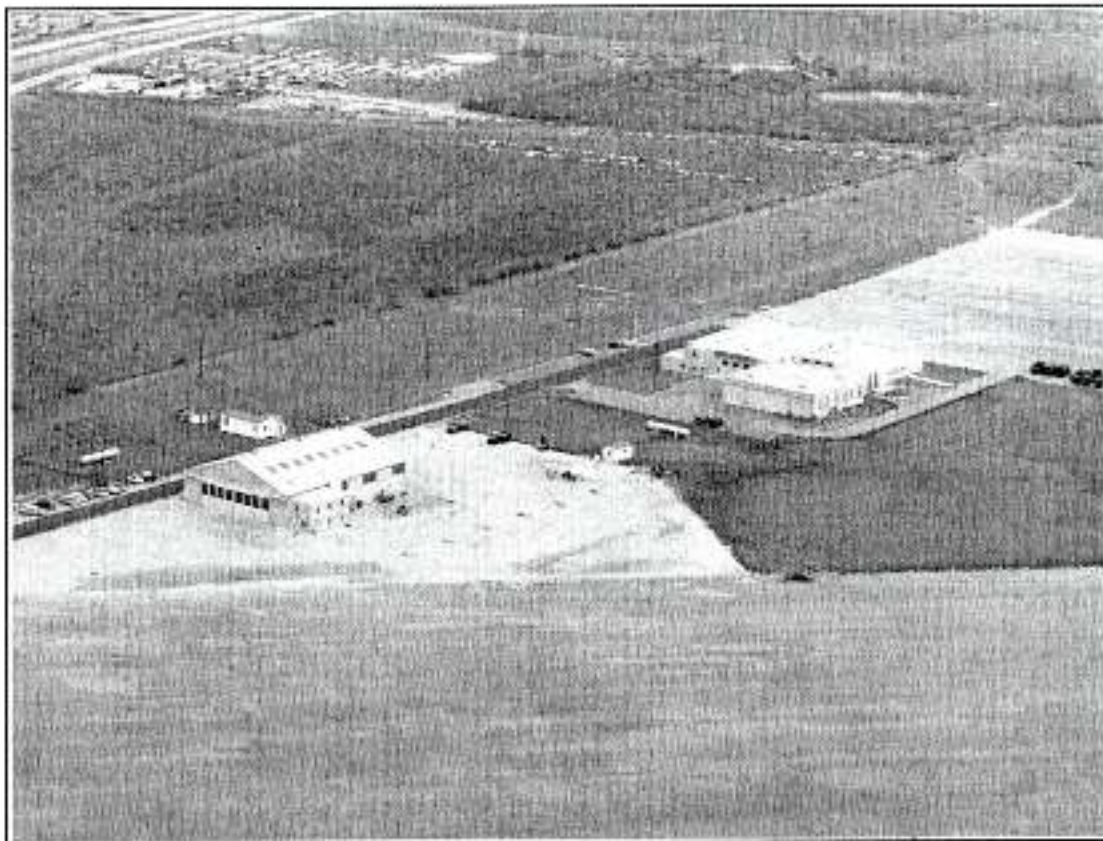


Figure C2. Aerial of Martindale Airfield showing Hangar (left) and Armory (right), view northwest. (Official Photograph Air National Guard Group 149th Fight Group, Kelly AFB, Texas., NEG # TANG 13 13 9).

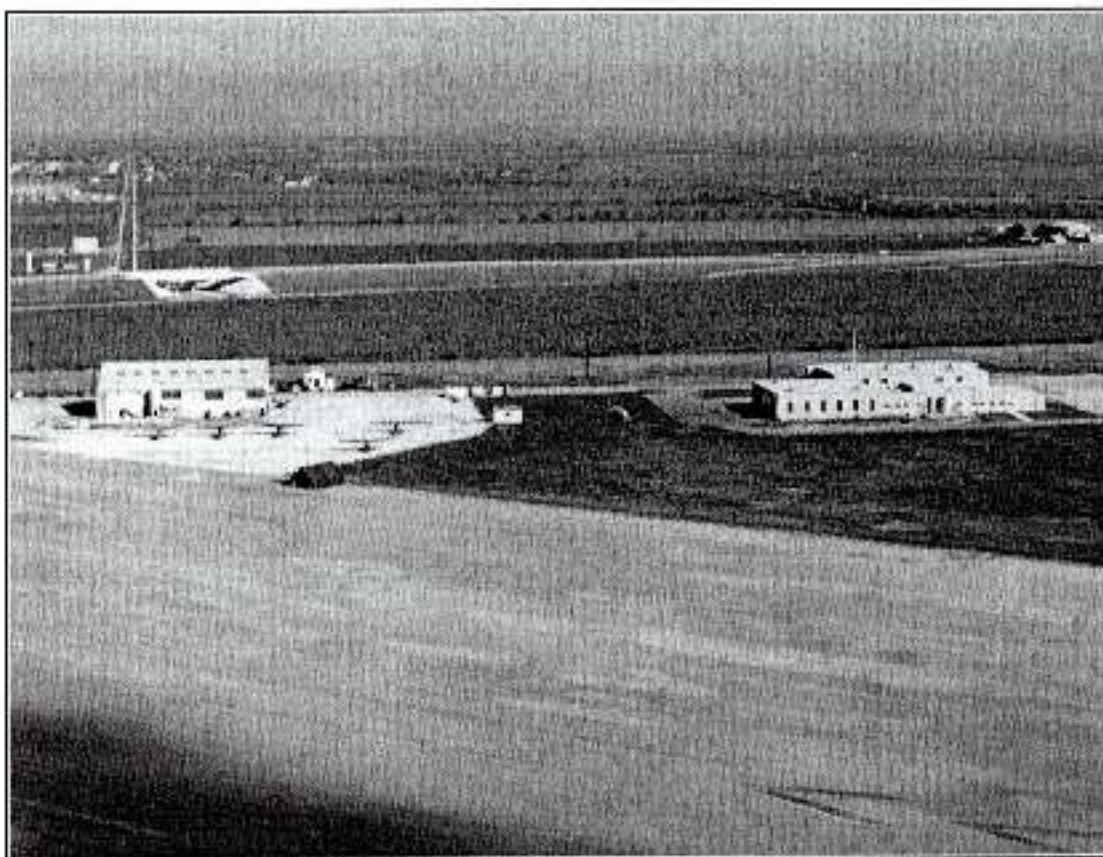


Figure C3. Aerial of Martindale Airfield showing Hangar (left) and Armory (right), view north
Photograph by Sgt. J. T. Elsis, 149th Fighter Group, Kelly AFB, Texas.

APPENDIX D:

NEWSPAPER ARTICLES REFERRING TO MARTINDALE FIELD

Cadet, Flier Die at Practice Of Landings

SAN ANTONIO, Texas, Jan. 26 (AP).—An Air Corps instructor and cadet from Randolph Field were killed at 3 p.m. Monday when their basic training plane crashed near Martindale Field, an auxiliary landing field about six miles southwest of Randolph Field.

The victims were Second Lieut. Foster L. Walker, 24, Stringtown, Okla., and Aviation Cadet James H. Cousins, 25, Wetumpka, Ala.

Randolph Field authorities said Lieutenant Walker and Cadet Cousins were practicing landings and take-offs in a three-plane formation when the crash occurred. The craft did not burn, officials said.

Figure D1. Dallas Morning News article about WWII pilot training at Martindale Airfield. "Cadet Flier Die at Practice of Landings." 27 January 1942: 4 Dallas Morning News

Army Seeks \$367,000 for Dallas Center

WASHINGTON—The Army has asked Congress for \$367,000 more for a 1,000-man reserve training center and motor vehicle shop in Dallas.

The requested amount will be in addition to \$453,000 already available for a programmed reserve training center at Dallas, but which has not been built.

The \$367,000 was appropriated by Congress last year but has not been spent.

Its Dallas John W. Carpenter, chairman of the State Fair of Texas livestock coliseum committee, said he did not know whether the Army's request had any connection with the building of a large \$4,200,000 livestock coliseum-armsy-civil defense center at Fair

Falls that was proposed to the City Council last month.)

The Army has planned, widespread construction of national guard armories and reserve training centers in Texas, figures furnished the House appropriations subcommittee handling Army spending, disclosed.

A bill covering military spending for the twelve months starting July 1 is expected to be completed by the House committee by April 2.

Funds for armories have been requested by the Army for the coming fiscal year at the following locations: Colorado City, Donna, Ingam, Kaufman, Lubbock, Reorgan, Stamford, Victoria, Breckenridge, Elgin and Texasica. Each will cost \$2,000, with the Federal Government furnishing \$17,300, except the Lubbock Army Government will provide \$41,250.

Requests were made for Army reserve training centers as follows: Humble, 20-man, costing \$55,000; Fort Archer, 250-man, \$35,000;

and Wichita Falls expansion, \$55,025.

The Army reported the following Texas construction programs programmed with money available, but not started: In addition to the one in Dallas:

Fort Army reserve: Aldine, \$5,000, for expansion by National Guard Building; Auda and Beaumont, a motor vehicle shop, \$7,000 each; Lubbock, for expansion, \$5,000; Waco, 300-man armory, \$65,000.

Fort National Guard: Vernon and San Marcos, \$30,000 each; Wichita Falls, \$170,000; Fort Worth, \$200,000; Aldine, \$150,000; Marshall, \$75,000; Grovesville, \$12,000; Platt, \$20,000; Decatur, \$30,000; New Boston, \$55,000; Mount Pleasant, \$20,000; Robinson, \$70,000; Fort Abilene, expansion, \$100,000; Nacogdoches, Abilene, Big Spring, Honey Grove, and Brady, \$144,000 each.

The Federal Government furnishes three-fourths, and the state one-fourth of the cost of these projects. The Army reported to the House committee that National Guard

armories were under construction on last March 1 at Corsicana, Bowie, Lampasas and Sweetwater. Armories were approaching completion at Beaumont, Lufkin, Rock, San Angelo, Arlington, Pampa, Tyler, Lockhart, Lamesa and Cotton Springs, owing a total of \$277,000.

An 800-man Army reserve training center and motor vehicle shop at Fort Worth also was under construction on last March 1.

The Army had secondary National Guard projects planned at Corpus Christi, Donna; Marmadale Field, San Antonio; Marshall, Fort Jett, Comstock and Fort Neches.

Figure D2. 1954 Dallas Morning News article about monies appropriated for Armories with mention of non-Armory funds going to Marmadale Airfield. "Army Seeks \$367,000 for Dallas Center." 19 April 1954; Part 1:3. Dallas, Texas.

State Would Get Two U.S. Tracts

Washington Bureau of The News

WASHINGTON. — The Senate armed services committee Saturday reported two bills turning over to the State of Texas for use by the National Guard tracts of federally owned lands at San Antonio and El Paso.

The state would acquire the 218-acre Martindale auxiliary field, one time used by Randolph Field, and a small tract now part of Fort Bliss, El Paso.

The Texas National Guard, the Air National Guard and the Civil Air Patrol have been using the San Antonio tract for several years under an arrangement with the Air Force.

Figure D3. Dallas Morning News article about Martindale property transferring from federal to state ownership. "State Would get Two U.S. Tracts." 9 August 1954: Part II: 8. Dallas, Texas

Blast Hurts 6 At NG Field

SAN ANTONIO, Texas (UPI)—An explosion at the Texas National Guard maintenance shop at Martindale Field Tuesday burned six persons, one seriously.

Police said the explosion occurred in an office building built onto a hangar at the field, which is east of San Antonio on U.S. Highway 90. The installation formerly was an auxiliary field for Randolph Air Force Base.

The injured were taken to Brooke General Hospital in San Antonio. They were: Sgt. 1-C Benjamin O. Knight, 35, burns on the hand; civilian employe Raymond G. Tullos, 28, burns on the hand; civilian employe William A. Whitaker, 33, burns on the hand; civilian employe Alvin Pawlik, 25, burns on the hand, and civilian Robert W. Phelps, burned on the back and believed to be in serious condition. The sixth person was not identified.

The cause of the explosion was not determined immediately.

Figure D4. Dallas Morning News article about explosion in offices attached to the hanger at Martindale Airfield. "Blast Hurts 6 At NG Field." 20 September 1961: Section 4:3 Dallas, Texas

Texas Projects Included in Bill

By ROBERT S. BASKIN
Washington Bureau of The News
WASHINGTON — Senate and House conferees Thursday agreed on a \$2,000,000 military construction bill, carrying selectively more money for Texas projects than was originally approved by the House Appropriations Committee.

Included in the measure were funds for two Texas National Guard armories which were not in the President's budget.

The measure, which had been approved by the Senate but not the House, was House No. 3, 124,000; Senate No. 422,000; House, 124,000; Senate, 422,000; and Texas, 200,000. Local matching funds are available for all five.

The bill also carries \$1,000,000 for construction of a hangar, warehouse, storage facilities and a flight simulator for the Texas Air National Guard headquarters at Hunter Field, Brownsville, and \$125,000 for Naval Reserve facilities at Dallas.

The conferees refused to approve a \$100,000-a-year appropriation for a postwar center at James Connally Air Force Base at Waco. Gen. Lyman B. Gossett had urged the appropriation, and it had been included in the measure passed by the House.

Another major Texas project, a hangar at Sheppard Air Force Base at Wichita Falls, was approved. The final amount agreed on was \$150,000. The Air Force had requested \$100,000, but the House appropriations committee had refused to commit any funds at all, contending that its "available out estimate" had been exceeded.

Next, the Air Force submitted a new estimate, which was approved by the Senate.

The conferees also approved \$100,000 for technical training facilities at Javelin Air Force Base. The House had voted only \$10,000 for other construction work at the base.

Another increase over the House measure came in a \$2,000,000 appropriation for Webb Air Force Base at Big Spring. No money for work there was included in the House bill. The conferees also voted \$100,000 for technical train-

ing facilities at Lockheed Air Force Base, the amount a few weeks had been denied by the House.

Whether the bill as finally agreed on was about 70 million dollars above the amount passed by the House, but it was still 10 million dollars less than requested by the Defense Department.

Other Texas projects in the bill were as follows:

Army — Fort Bliss, \$100,000; Fort Hood, \$200,000; Fort Sam Houston, \$100,000; Nelson Barracks, \$200,000.

Air Force — Biggs Army Airfield, \$75,000; Biggs AFB, Ft. Worth, \$200,000; Carlisle AFB, Fort Worth, \$125,000; Dyess AFB, Abilene, \$175,000; Fife AFB, Sherman, \$40,000.

Army National Guard armories — Martindale, \$110,000; Galveston, \$1,000; Houston, \$20,000; El Campo, \$50,000.

Army Reserve — Alton, Bay City, Marshall, McAllen and Rio Grande City, \$25,000 each; Brownsville, Galveston, Odessa, San Antonio and Texas, \$10,000 each.

Navy Reserve—Brazosport, \$10,000; Galveston, \$20,000; Kingsville, \$10,000.

Air Force Reserve—El Paso AFB, El Paso, \$200,000.

Figure D5. 1959 Dallas Morning News article about money for Armory Construction at Martindale Airfield. "Texas Projects Included in Bill," 4 September 1959; Section 1:13, Dallas

