US Army Corps
of Engineers
Rock Island District

Defense Environmental Restoration Program
for
Formerly Used Defense Sites
Ordnance and Explosive

Archives Search Report

FINDINGS

for
the former

COURTLAND ARMY AIR FIELD

COURTLAND, ALABAMA
Project Number I04AL004904

SEPTEMBER 1997

DEFENSE ENVIRONMENTAL RESTORATION PROGRAM
for
FORMERLY USED DEFENSE SITES

FINDINGS

ORDNANCE AND EXPLOSIVES ARCHIVES SEARCH REPORT For The Former COURTLAND ARMY AIR FIELD COURTLAND, ALABAMA

OE Project Number I04AL004904

SEPTEMBER 1997

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ORDNANCE AND EXPLOSIVES
ARCHIVES SEARCH REPORT
For The Former
COURTLAND ARMY AIR FIELD
COURTLAND, ALABAMA
OE Project Number I04AL004904

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ORDNANCE AND EXPLOSIVE WASTE
ARCHIVES SEARCH REPORT
For The Former
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OE Project Number I04AL004904

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1. INTRODUCTION

a. Subject and Purpose

(1) This report presents the findings of an historical records search and site inspection for ordnance and explosives (OE) presence located at the former Courtland Army Air Field, Courtland, Alabama (see plate 1 for general location map). The investigation was performed under the authority of the Defense Environmental Restoration Program for Formerly Used Defense Sites (DERP-FUDS).

(2) This investigation focused on approximately 2,449 acres of land that were used by the War Department. The site was used as an army airfield from 1942 to 1946. It was then placed in standby status and officially turned over to the State of Alabama on 2 June 1948.

(3) The purpose of this investigation was to characterize the site for potential OE presence, to include conventional ammunition and chemical warfare material (CWM). This investigation was conducted by experienced ordnance experts through thorough evaluation of historical records, interviews and an on-site visual inspection results.

b. Scope

(1) This report presents the site history, site description, real estate ownership information, and confirmed ordnance presence (prior to and after site closure), based on available records, interviews, site inspections and analyses. The analyses provide a complete evaluation of all potential OE presence where ordnance presence has not been confirmed.

(2) For the purpose of this report, OE presence consists of live ammunition, live ammunition components, CWM or explosives which have been lost, abandoned, discarded, buried, fired or thrown from demolition pits or burning pads. These

items were manufactured, purchased, stored, used, and/or disposed of by the War Department/Department of Defense. Such ammunition/components are no longer under accountable record control of any DOD organization or activity.

(3) **Expended** small arms ammunition (.50 cal or smaller), is **not** considered OE presence. OE further includes "explosive soil" which refers to any mixture in soil, sand, clay, etc., such that the mixture itself is explosive. Generally, 10 percent or more by weight of secondary explosives in a soil mixture is considered explosive soil.

2. PREVIOUS INVESTIGATIONS

a. 1990 DERP-FUDS Preliminary Assessment

A Preliminary Assessment of Courtland Army Air Field was conducted under the DERP-FUDS by the US Army Corps Of Engineers, Mobile District (CESAM) in 1990 (see document E-1). The Findings and Determination of Eligibility, dated 8 May 1991, concluded that the 2,449 acres located in Courtland, Lawrence County, Alabama, had been formerly used by the War Department/Department of Defense. That report recommended referral to Corps of Engineers, Huntsville Division (CEHND), now Corps of Engineers, Huntsville, Engineering and Support Center (CEHNC), for an evaluation of possible ordnance presence. Table 2-1 represents an overview of the PA phase. Headquarters, Corps of Engineers, authorized an OE project, number I04AL004904.

TABLE 2-1
DERP-FUDS PRELIMINARY ASSESSMENT PROJECTS

Project Number	DERP Category	Present Phase	Comments	Location
I04AL004901	HTRW	SI	In progress	
I04AL004902	CON/HTRW	SI	In progress	
I04AL004903	BD/DR	SI	In Progress	
I04AL004904	OE	SI	Ordnance or Explosives presence	Entire site (See Plate 2)

b. Other Investigations

There are investigations of this site in progress. The investigations are being conducted by CESAM.

3. SITE DESCRIPTION

a. Existing Land Usage

(1) The former Courtland Army Air Field is located approximately 1.5 miles west of Courtland, Lawrence County, Alabama. The area consists of approximately 2,449 acres.

(2) The area is used for municipal airport, agriculture, industry and private ownership. Table 3-1, on the next page, is included to represent the current land usage of the former Courtland Army Air Field (See Plate 4).

b. Climatic Data

(1) Courtland AAF is in Lawrence County, in the north central portion of Alabama and has a temperate climate. Summers are characterized by warm and humid weather, with rather frequent thunderstorms. Winters are usually rather cool, but vary considerably from one year to the next.

(2) Cold air masses from the continent are predominant over the area during the winter season, but, at times, mild air from the Gulf of Mexico spreads northward to Courtland or beyond and may persist for several days in succession. The contrast between air masses frequenting the region in the winter provides a potential source of energy for producing extensive periods of low cloudiness and rain, the results being that four months, December, through March, account for about 43 percent of the normal precipitation. Severely cold weather seldom occurs. Temperatures in the 90's prevail during the summer months. Temperatures above 100 degrees Fahrenheit or higher have been recorded as early as May 8 in 1961 and as late in the year as September 23 in 1936. Temperatures of 32 degrees Fahrenheit or lower have been recorded as early as September 20 in 1924 and as late as May 27 in 1907. Temperatures of 0 degrees or lower have been recorded as early as December 4 in 1909 and as late as March 12 in 1948.

TABLE 3-1
CURRENT LAND USAGE

AREA	FORMER USAGE	PRESENT OWNER	CURRENT USAGE	SIZE Acres*	COMMENTS
A	Pistol Range	Lawrence County Industrial Board	Agriculture	5	See Plates 3 and 4
B	Building T-630	Lockheed Martin	Industry	1	See Plates 3 and 4
C	Ammunition Storage Area	Lawrence County Industrial Board	Industry	9	See Plates 3 and 4
D	Chemical Training Area	Lawrence County Industrial Board	Industry	16	See Plates 3 and 4
E	Gas Chamber	Lawrence County Industrial Board	Industry	4	See Plates 3 and 4
F	Sewage Treatment	City of Courtland	Industry	22	See Plates 3 and 4
G	Skeet Range	City of Courtland	Agriculture	7	See Plates 3 and 4
H	Incinerator	City of Courtland	Industry	1	See Plates 3 and 4
I	Remaining Lands	Multiple Owners (9)	Agriculture, Industry, Private Ownership	2,384	See Plates 3 and 4
*Indicates Approximate Acreage			Total	2,449	

(3) Thunderstorms during the growing season contribute most of the moisture. In general, the thunderstorms are widely scattered, occurring during the late afternoons and evenings. They are occasionally accompanied by hail and strong winds, but due to the local nature of the storms, damage to crops and buildings is spotty and variable (Reference B-10).

c. Topography

Courtland Army Air Field is located in Lawrence County and is essentially flat although slightly rolling in parts with a general drainage to Big Nance Creek, in a southeasterly direction. Low mountain ranges lie to the south and southwest of CAAF and was of sufficient distance from CAAF not to have interfered with a glide angle of 40 to 1. (Reference B-30).

d. Geology and Soils

(1) Tuscumbia Limestone and Fort Payne Chert, of Mississipian Age, underlie CAAF. This is found under an average overburden of about 28 feet.

(2) The soil associations at the former CAAF are predominately Decatur-Cumberland-Abernathy soil. This association also includes Colbert, Dewey, Etowah and Talbot soils. The Etowah soils, which is the predominant of this association, is well drained. A large portion of the site is in farmland. This association is the most productive part of the county because the soils are smooth and well drained (Reference B-8)

e. Hydrology

(1) The hydrogeologic environment of Lawrence County is that the recharge to the groundwater system originates from local precipitation and occurs over the entire surface area. The Tennessee River is the northern boundary of the county and Big Nance Creek forms a portion of the southeastern boundary of the former CAAF.

(2) Groundwater movement is from areas of higher surface elevations toward lower surface elevations. Part of the precipitation on the site infiltrates the surficial material and moves to the water table where lateral movement occurs toward the discharge area along Big Nance Creek. Ground water availability at the Courtland Site is good. The ground water occurs in fractures and crevices in the limestone, some of which have been solutionally enlarged by circulating groundwater. The quality of the groundwater is considered fair (reference B-29).

f. Natural Resources

The US Fish and Wildlife Service provided a listing of threatened and endangered species that may be found in the area of Courtland Army Air Field. This information is provided in Table 3-2 (See document F-1).

g. Historical/Cultural Resources

(1) There were no cultural or historical sites associated with this site found during the archives search, site inspection, or communication with the Alabama Historical Commission (See document F-2).

(2) Any intrusive measures taken within the area will require oversight by the State Historical Preservation Office (SHPO) and/or other like organizations.

TABLE 3-2
NATURAL & CULTURAL RESOURCES

Resource Classification	Type	Federal Status*	State Status*
Wildlife	Birds		
	Bald Eagle	T	T
	Peregrine Falcon	E	E
	Wood Stork	E	E
	Red-cockaded Woodpecker	E	E
	Mammals		
	Gray Bat	E	E
	Indiana Bat	E	E
	Reptiles	None Listed	
Vegetation		None Listed	
Cultural/ Historical	Prehistoric	Coordinate with SHPO	
	Historic		

* Key: E-Endangered T-Threatened

4. HISTORICAL ORDNANCE PRESENCE

a. Chronological Site Summary

(1) Prior to WWII, the land for Courtland Army Air Field was privately owned and used primarily for farming. The acquisition of land for military use began in 1942 (Reference B-19 and document L-5).

(2) Courtland AAF was activated 14 December 1942 and was used as an Army Air Forces Basic Flying School for training pilots for the B-24 Liberator Bombers (Reference B-19).

(3) In 1945 the War Department determined that no further need exists for Courtland Army Air Field. The Army Air Forces Eastern Flying Training Command (AAFEFTC) was requested to initiate a declaration of surplus in May of 1945. It was declared surplus effective 30 June 1945. Courtland AAF was transferred to the War Assets Administration in November 1946 (See documents F-8, F-9 and F-12).

(4) Leased property reverted to the owners in November 1946.

(5) The remaining lands were transferred by Quitclaim Deed to the State of Alabama 2 June 1948 (See documents F-13).

b. Ordnance Related Records Review

(1) Research efforts began with a thorough review of all reports, historical documents, and reference material gathered during the archival search appropriate to Courtland Army Air Field. During this review, an effort was made to focus on areas of potential OE presence as described in the OE project summary sheet.

(a) Sources that were checked in the search for any recorded OE contamination included:

[1] National Archives
[2] Regional Archives
[3] Alabama State Archives
[4] The Military History Institute
[5] The Air Force Historical Center
[6] Explosive Ordnance Disposal (EOD)
[7] Local Police Department
[8] County Court House
[9] State and Local Libraries

(b) For a complete list of sources checked, see Appendix A, References Sources.

(2) There is documented evidence of ordnance presence within Courtland Army Air Field during the months of its operation. The installation had a pistol range, ordnance storage area, chemical training area, a gas chamber, and a skeet range.

(3) The pistol range was located in the southwest corner of the airfield and was used to fire pistols, submachine guns and carbines for Marksmanship Training. The range backstop was excavated in 1947 or 1948 (See documents F-4, F-5, F-6 and F-7).

(4) Expended incendiary bombs were found near the former location of building T-630, Enlisted Men's Mess, during an environmental assessment in 1993. Building T-630 is in "Area G on document L-3 and L-4 (See documents F-14 and F-15 and Plate 3).

(5) The ordnance storage area was used to store small arms ammunition, incendiary munitions and smoke munitions. It is assumed that the gases used for mask training and war gas identification kits were also stored there (See documents D-1, D-2 and F-3 thru F-7).

(6) The gas chamber used for Chemical Warfare training was located in the northeastern portion of the installation east of the Ordnance Storage Area. The types of training conducted were gas alert practice for the field and identification of war gases (See Documents D-2, F-3, F-4, F-5, F-6, F-7 and Plate 3).

(7) The skeet range was located in the southwestern portion of the airfield. Student officers were given skeet range practice during their training at Courtland. Document D-3 illustrates the typical layout of a range that could have been used at Courtland Army Air Field (See documents L-1, F-3, F-4, F-5, F-6 and F-7).

c. Interviews With Site Related Personnel

(1) Efforts to locate individuals who had served or had first hand knowledge of the Former Courtland Army Air Field were fairly successful. Personal interviews were conducted with local individuals that had worked at Courtland Army Air Field during the war years.

(2) There were interviews with city and county personnel that had no knowledge of any ammunition hazards associated with Courtland Army Air Field. These individuals are present employees of the city and county government (See documents I-1, I-3 and I-9).

(3) Residents of the area that had some involvement with the former Courtland Army Air Field had no knowledge of any ammunition related hazards associated with the installation. The backstop for the pistol range was partially excavated and cleaned of metal in 1947 or 1948 (See document I-4, I-8 and I-11).

(4) Interviews with former military members that were stationed at Courtland Army Air Field during WWII revealed that personnel were required to fire pistols or carbines for marksmanship training, practice gas attack drills using a gas mask, practice donning a gas mask while subjected to tear gas and training in war gas identification. The chemical agents that were used during the training were tear gas, mustard agent, chlorine gas, incendiary and smoke munitions. These individuals had no knowledge of any ammunition related hazards associated with CAAF either before or after the installation was returned to civilian use in 1947. They were not aware of how chemical munition items were disposed of at the end of the war or of any OE hazards. The gas chamber is reported to have been a tent and not a wooden structure. The chemical training area as depicted in this report was not officially designated as such by the military from 1942 through 1945. This area is considered as a chemical training area because of the interviews, with former military personnel stationed at CAAF, during the investigation (See documents I-6 and I-10).

(5) Interview with the chief deputy sheriff revealed that he had heard of items being found at Courtland, but was not aware of what was found (I-2).

(6) Interview with the Safety Engineer and Security Officer at Lockheed Martin revealed that ammunition items had been found during the environmental assessment phase of their acquiring acreage at the former CAAF. Lockheed Martin presently owns approximately 663 acres of the former CAAF (See document I-7).

(7) Interview with the Vice President of Manufacturing for Calaway Industries also confirms that some munition items

were found, but the items were found on Lockheed property. He stated that some small arms casings were found on Calaway property but that they were of a more recent time than WWII (see document I-5).

5. SITE ELIGIBILITY

a. Confirmed Formerly Used Defense Site

Former land usage by the War Department was previously confirmed for the entire site as summarized in section 4a of this report. The 2449 acres of the former Courtland Army Air Field was used by the War Department/Department of Defense as a training facility primarily for B-24 pilots. Historical documents and personal interviews confirm this finding. No ownership or usage of any part of the former Courtland Army Air Field remains with the Department of Defense (DOD) (See plate 4).

b. Potential Formerly Used Defense Site

(1) The acreage of the former Courtland Army Air Field appears to have been correctly identified as described in the Findings and Determination of Eligibility, dated 8 May 1991 (See document E-1).

(2) No additional acreage was found, that could be considered a potential formerly used defense site, during this investigation.

6. VISUAL SITE INSPECTION

a. General Procedures and Safety

(1) During the period of 21 to 25 April 1997, members of the Assessment Team traveled to the former Courtland Army Air Field. The primary task of the team was to assess OE presence and potential due to its former usage as an Army Air Field. Site inspection was limited to non-intrusive methods; i.e. subsurface sampling was not authorized nor performed.

(2) Real estate rights-of-entry were not obtained nor deemed necessary, the present owners of the site were very helpful in granting access to the property.

(3) A site safety plan was developed and utilized by the assessment team to assure safety from injury during the site inspection of this facility. Prior to the inspection, a briefing was conducted which stressed that OE should only be handled by military EOD personnel (Reference B-6).

(4) Prior to the site visit, a thorough review of all available reports, historical documents, texts, and technical ordnance reference materials gathered during the historical records search portion was made to ensure awareness of potential ordnance types and hazards.

(5) The team traveled to the former Courtland Army Air Field in a vehicle and then covered the specific areas by foot. Mr. Clyde Terry, who was employed at CAAF from the time it was being constructed until it was closed, guided the team. The team did not observe evidence of ammunition or ammunition presence. There was no evidence of war gas presence on any of the sites of Courtland Army Air Field.

(6) The site is broken down into sub-sites for this report: i.e., Area A is the Pistol Range, Area B is the Building T-630, where expended incendiary munitions were found in 1993, Area C is the Ammunition Storage Area, Area D is the Chemical Training Area, Area E is the Gas Chamber, Area F is the Sewage Treatment Facility, Area G is the Skeet Range, Area H is the Incinerator and Area I is Remaining Lands (See Plate 3).

b. Area A: Pistol Range

(1) This area was located in the southwestern corner of the installation at the former CAAF. The area consists of approximately 5 acres.

(2) The area no longer has a complete backstop. The backstop was partially excavated in the 1947 or 1948 time period. The dirt was cleared of metal and is assumed to have been scattered in the adjoining fields. Only a portion of the berm still exists since the excavation at the site (See photograph J-13, J-14 and plate 5).

(3) The site of the pistol range, except the remaining portion of the berm are presently farm land and is cultivated for crops. The SI team saw no evidence of ammunition presence in the area (See documents J-13, J-14 and Plate 3 and 5) .

c. Area B: Building T-630

(1) This area is approximately 1 acre in size and is located within the cantonment area. The location is the former Enlisted Men's Mess building. The area is overgrown with weeds, small trees and still has the concrete foundation for the building. There is nothing visible to indicate any chemical or ammunition presence in this area.

d. Area C: Ammunition Storage Area

(1) This area is located in the northeastern portion of the installation and is west of the sewage treatment facility and the gas chamber area. It consists of approximately 9 acres.

(2) The buildings that were located within this area are no longer standing. The only evidence of their location is the concrete foundations and the road within the old ammunition area. The site is overgrown with trees, weeds and brush.

(3) There was no visual evidence of chemical or ammunition presence in this area (See documents J-2, J-3, J-4, and plate 3 and 5).

e. Area D: Chemical Training Area

(1) This area is east of the Ammunition Storage Area and west of the Gas Chamber area and consists of approximately 16 acres. There were no buildings located within this area. The area is presently overgrown with trees, weeds and underbrush. There was no visual evidence of chemical or ammunition presence in this area (See document J-5, and plates 3 and 5).

f. Area E: Gas Chamber

(1) This area consists of approximately 4 acres and is located west of the sewage treatment facility and east of the Ammunition Storage Area.

(2) There are no buildings or structures remaining on the site. Documentation shows that there was a Gas Chamber located east of the of the Chemical Training Area with the

building designation of T-463. The site has very dense vegetation. There was no visual evidence of chemical or ammunition presence in this area (See photograph J-5 and Plate 5).

g. Area F: Sewage Treatment Facility

(1) This area is approximately 22 acres in size and is located in the northeast corner of the installation. The area is covered by very dense vegetation.

(2) Concrete foundations can be found through out the area but are very difficult to see from a distance. There was no visual evidence of chemical or ammunition presence in this area (see documents J-6, J-7 and plate 5).

h. Area G: Skeet Range

(1) This area is approximately 7 acres in size and located in the southwest portion of the former CAAF east of the former pistol range.

(2) There are no buildings or structures left of the original skeet range . This area is presently under cultivation and nothing can be seen to indicate the areas former usage.

(3) The inspection team observed no ammunition items within this area. There was no visual evidence of chemical or ammunition presence at the site (see documents J-13 and Plate 5).

i. Area H: Incinerator

This area is located west of the Ammunition Storage Area and consists of approximately 1 acre. The only remains of the incinerator is the concrete foundation. There was no visual evidence of chemical or ammunition presence in this area.

j. Area I: Remaining Lands

(1) This area consists of all the remaining lands of the former Courtland Army Air Field approximately 2,384 acres.

(2) There were no other sites within the remaining lands that could be associated with chemical or ammunition presence (see documents J-1, J-8, J-11, J-12 and plate 5).

(3) There was no evidence of chemical or ammunition presence in this area.

7. EVALUATION OF ORDNANCE HAZARDS

a. General Procedures

(1) Each sub-site was evaluated to determine confirmed, potential, or uncontaminated ordnance presence. Confirmed ordnance and explosive (OE) presence is based on verifiable historical record evidence or direct witness of OE items (with explosive components and/or inert debris/fragments) since site closure. Additional data is not needed to identify a confirmed site. Verifiable historical record evidence is based on OE items actually seen on site since site closure and authenticated by: historical records (Archive Records, Preliminary Assessment Reports, Site Investigation Reports), local fire departments and law enforcement agencies/bomb squads, military Explosive Ordnance Disposal (EOD) Units, newspaper articles, photographs or maps. Direct witness of OE items consists of the site inspection team(s) and other credible witnesses as determined by the ASR Research Team Leader (landowners, workers on-site, soldiers who served there, etc.) verifying that they have seen OE presence on the surface or subsurface since site closure.

(2) Potential ordnance and explosive (OE) presence is based on a lack of confirmed OE presence. Potential OE presence is inferred from records, present day site features, non-verifiable direct witness, or indirect witness. Additional field data is needed to confirm potential ordnance subsites. Inference from historical records is based on no OE items actually seen on site since site closure and would include common documentation (records, aerial photographs, maps) indicating possible OE presence derived from common practice in production, storage, use or disposal at that time and from records indicating known OE usage. Potential ordnance presence could also be based on indirect witness or from present day site features.

(3) Uncontaminated OE subsites are based on a lack of confirmed or potential ordnance evidence. There is no reasonable evidence, either direct or inferred, to suggest present day ordnance presence. Additional field data is not needed to assess uncontaminated ordnance subsites.

b. Area A: Pistol Range

Based on materiel collected during the ASR, this area is considered an **uncontaminated** area. This is based on historical documentation and visual evidence. The OE SI team found no ammunition items within the pistol range area. Only expended small arms ammunition residue would have remained at time of site closure. A contract was awarded in the 1947-1948 time period for the clean up of any metals left in the berm of the pistol range. Expended small arms ammunition is not considered OE. The land around the remaining portion of the berm is under cultivation and has been for years. There have been no reports of chemical or ammunition items being found before or since site closure.

c. Area B: Building T-630

(1) This area is considered **confirmed**. There was expended AN-M56 incendiary devices and possible AN-M50A1 found in this area during a 1993 environmental assessment (see documents F-14, F-15, K-1, K-5, K-6 and plate 3).

(2) The items were found among other debris as if it had been collected and thrown on a pile with other trash. The items were found at the former location of building T-630 Enlisted Mess (dining facility) (see documents L-3 and L-4).

(3) The building was still standing in 1954 and the munitions could have been placed there after WWII and after closure of the installation.

d. Area C: Ammunition Storage Area

(1) There is no evidence to indicate this area has OE presence, explosives or chemicals.

(2) The items that were stored there have long since been disposed of in an approved manner. There is no documented or physical evidence of ammunition being disposed of in an unapproved procedure. Therefore, this area is considered **uncontaminated** (see document F-7).

e. Area D: Chemical Training Area

(1) There is documented evidence of this area being used for training with tear gas and war gas identification kits. This area is considered **potential** OE presence (see documents I-6 and I-10).

(2) There was no physical evidence witnessed by this SI team of chemical waste, chemical ordnance or OE presence at this site. There is a Certificate of Clearance that states a small amount of poison gas was buried in the northeast section of the base on approximately a quarter of an acre of land (see document F-11).

(3) The army air field had small amounts of the M1 Chemical Agent Identification Training Kits on hand. These items along with Tear Gas, Chlorine, and smoke were used for training personnel assigned to the installation. Interviews with former servicemen indicates that there was on going chemical training while they were stationed at CAAF (F-3, F-4, F-5, F-6, F-7, I-6 and I-10).

(4) The exact location of this burial site is not known. It is surmised that the chemical training area is possibly an area the poison gas would have been buried. Therefore this area is considered **potential** OE presence.

f. Area E: Gas Chamber

(1) There is documented evidence indicating that chemical agents were used in this area. The chemicals used were tear gas, chlorine, mustard agents and smoke (F-3 thru F-7).

(2) There are no physical signs to indicate that chemical training took place in this area. It is surmised that the chemical training area is possibly an area that poison gas could have been buried. Therefore this area is considered **potential** OE presence (see document F-11).

g. Area F: Sewage Treatment Facility

It is surmised that the sewage treatment facility area is possibly an area that poison gas could have been buried. Therefore this area is considered **potential** OE presence (see document F-11, K-1, K-2, K-5 and K-6).

h. Area G: Skeet Range

The only ammunition used in this area would have been shotgun ammunition. Shot gun ammunition is not considered OE. Therefore this area is considered **uncontaminated.**

i. Area H: Incinerator

There is no evidence this area ever had chemical or conventional ammunition items disposed of on it. Therefore this area is considered **uncontaminated**.

j. Area I: Remaining Lands All Remaining Lands

(1) There were no other sites within the remaining lands that could be associated with OE presence. Therefore this area is considered **uncontaminated**.

(2) The northeast portions of the remaining lands belongs to Lockheed Martin and were included in the environmental assessment of 1993. These lands were surveyed using two geophysical techniques: electromagnetic conductivity and magnetometer surveying. There were no anomalous areas found to indicate the presence of OE (See document F-14).

8. SITE ORDNANCE TECHNICAL DATA

a. End Item Technical Data

(1) While no comprehensive list of the exact types of ammunition used at the former Courtland Army Air Field could be located, there is documentation showing an inventory of the small arms and weapons used at that time period at the installation. Evidence exists that chemical warfare materials, components of the M1 Chemical Agent Identification Training Kits, and chlorine were used at this site.

(2) Table 8-1, on the next page, has been developed to establish a list of potential ordnance items and their fillers that could have been stored and used at CAAF. This table has been developed based on historical documentation and circumstances under which this area was used. This table does not contain all the possible ordnance that could have been stored

at CAAF. The model numbers used to delineate possible types are speculative and are based on common models that existed during WWII. This table should not be construed as to suggest that any ordnance remains on this site. This table is for reference purposes only.

TABLE 8-1
SUMMARY OF SITE SPECIFIC ORDNANCE

NAME	MODEL/TYPE	FILLER/weight	FUZE
Bomb Incendiary, 4 lb	AN-M50A1	Thermate igniting mixture 10 oz	PD
Bomb, Incendiary, Oil, 10 lb	AN-M56	Oil Emulsion, IN or NP, Gelled Gasoline, 2.8 lbs	M1
Cartridge	.30 Caliber	Lead Core Hardened Metal Jacket, Smokeless Powder	
	.45 Caliber	Lead Bullet Smokeless Powder	
Shell, Shotgun	12 gauge	Lead Shot, Smokeless Powder	
Tear Gas	CN Capsule	Chloracetophenone	
Gas, Identification	M-1 Detonating	Mustard, 5% in Chloroform/ 12oz Lewisite, 5% in Chloroform/ 12oz Chloropicrin, 50% in Chloroform/ 12oz Phosgene, undiluted 12oz	

b. Chemical Data of Ordnance Fillers

Table 8-2, has been developed to provide information on the explosive/chemical compounds used in the ordnance cited in Table 8-1.

9. OTHER ENVIRONMENTAL HAZARDS

a. Hazardous, Toxic, and Radiological

The ASR team did not find any evidence of hazards, present on this site, that would warrant initiation of an HTRW project.

TABLE 8-2
SUMMARY OF SITE ORDNANCE FILLERS

Explosive Material	Synonyms	Chemical Compounds
Black Powder		
74% Potassium Nitrate	Salt Peter; Niter	KNO_3
11% Sulfur		S
16% Charcoal		C
Smokeless Powder		
Various %s of Nitrrocellulose	Nitrocotton	$(C_6H_5(OHO_2)_3)_n$
Dinitrotolulene	DNT	$C_6H_2CH_3(NO_2)_2$
Dibutyphalate	Gelling Agent	$C_6H_4(CO_2C_4H_9)_2$
Diphenylamine	DPA, Stabilizer	$(C_6H_5)_2NH$
Mustard	HD	$(ClCH_2CH_2)_2S$
Lewisite	L	$ClCH:CHA_8Cl_2$
Chloropicrin	CNS	$C_6H_5COCH_2Cl$
Chlorine	Cl	Cl_2

b. Building Demolition/Debris Removal

There was no evidence found to suggest any building or debris projects, which could be attributed to Department of Defense usage.