



**US Army Corps
of Engineers**

HUNTSVILLE ENGINEERING
AND SUPPORT CENTER

**Defense Environmental Restoration Program
for
Formerly Used Defense Sites
Ordnance and Explosives**

**ARCHIVES SEARCH REPORT
CONCLUSIONS AND RECOMMENDATIONS**

Siskiyou County Airport

Montague, California

Project Number - J09CA095003

SEPTEMBER 1998 (FINAL)

Prepared by
**US ARMY CORPS OF ENGINEERS
ST. LOUIS DISTRICT**

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1.0 INTRODUCTION

1.1 AUTHORITY

In 1986, Congress established the Defense Environmental Restoration Program (DERP) at 10 United State Code (USC) 2701 et seq. This program directed the Secretary of Defense to "carry out a program of environmental restoration at facilities under the jurisdiction of the Secretary."

In March 1990, the Environmental Protection Agency (EPA) issued a revised National Contingency Plan (NCP). Under 40 Code of Federal Regulations (CFR) 300.120, EPA designated the Department of Defense (DoD) to be the removal response authority for incidents involving DoD military weapons and munitions under the jurisdiction, custody and control of DoD.

Since the beginning of this program, the U.S. Army Corps of Engineers has been the agency responsible for environmental restoration at Formerly Used Defense Sites (FUDS). Since 1990, the U.S. Army Engineering and Support Center, Huntsville (CEHNC) has been the Center of Expertise (CX) and Design Center for Ordnance and Explosives.

1.2 SUBJECT

The military use of **Siskiyou County Airport** included 985.44 acres near Montague, California located in Siskiyou County. The U.S. Army Air Corps and the U.S. Air Force used the airport over two separate periods, from 1942 to 1945 and from 1962 to 1972. The site first served as an auxiliary field and later as a dispersal base. Improvements to the site during World War II did not include any ordnance storage or range facilities. During the dispersal base period, the U.S. Air Force constructed a 19 bay ordnance storage magazine on an abandoned runway and designated a 3 acre "ammo disposal area". The Air Force ended their dispersal program at Siskiyou County Airport by 19 July 1971. They transferred the property to the General Services Administration (GSA), who terminated the lease in 1972. Plate 1 in the report plates section shows the general location of the site.

1.3 PURPOSE

The Archives Search Report (ASR) compiles information obtained through historical research at various archives and records holding facilities, interviews with persons associated with Siskiyou County Airport or its operations and a team inspection of the site. The search directs efforts towards determining possible use or disposal of ordnance and explosives (OE) and chemical warfare materials (CWM) on the site. The research places particular emphasis on establishing the types, quantities and areas of disposal. This process obtains information for use in developing recommendations for further action at the Siskiyou County Airport.

1.4 SCOPE

This investigation focuses on potential OE and/or CWM contamination remaining on the Siskiyou County Airport. The DERP-FUDS project number is J09CA095003. This report presents the following:

- A brief history of Siskiyou County Airport
- Description and characteristics of the immediate surrounding area
- A review of related site investigations
- An aerial photography and map analysis of the site
- Real estate information, past and present
- Findings of the site inspection
- Description of the OE and/or CWM identified with the site

These factors represent the basis for the evaluation of potential OE and CWM contamination and associated risks at Siskiyou County Airport.

2.0 CONCLUSIONS

2.1 SUMMARY OF CONCLUSIONS

2.1.1 Conventional Ordnance

The archive search located evidence confirming that the U.S. Army Air Corps and the U.S. Air Force used **Siskiyou County Airport** as an auxiliary field and later as a dispersal base. The site has two ordnance related features: a 19 bay ordnance storage magazine and an Ammunition Disposal Area. The base did not have any firing ranges. The specific types of ordnance and explosives associated with the site were undocumented but assumably included gun ammunition (20mm), air-to-air missiles, Cartridge Actuated Devices (CADs), Propellant Actuated Devices (PADs) and possibly bombs and rockets.

Potential OE hazards resulting from past storage of ammunition in the storage magazine is negligible. However, disposal of ammunition on site suggests potential remains of OE items. The site inspection verified disposal activities by locating a piece of OE fragmentation in the Ammunition Disposal Area. Based on safety distances involved, the disposal activities at the site would most likely would have been limited to tamped, subsurface detonations, with a low explosive limit, probably in the 5-10 lb. range.

The rumors concerning the presence of special weapons at Siskiyou County Airport were not substantiated, but it's likely that training exercises concerning that scenario occurred periodically.

2.1.2 Chemical Warfare Materials

The archive search uncovered no evidence that chemical warfare training occurred or that the military stored, used or disposed of chemical warfare materials at Siskiyou County Airport. No identifiable remediation project exists concerning CWM at the site and the ASR concludes no further action required for this portion of the project.

2.2 HISTORICAL SITE SUMMARY

The U.S. Army Air Corps and the U.S. Air Force used the **Siskiyou County Airport** over two separate periods, from 1942 to 1945 and from 1962 to 1972. The site first served as an auxiliary field and later as a dispersal base.

The U.S. Army Air Corps first leased the Siskiyou County Airport on 18 November 1942¹.

¹ Historical documents of the time also refer to the site as Montague Municipal Airport, the Montague Airport or the Montague Army Air Field. This leads to confusion, as the actual Montague Municipal Airport, is another airfield owned by the City of Montague and located one mile west of town. This airport never appears to have been used by the military.

The airport was constructed with funds from the Civil Aeronautics Administration (CAA). The Army upgraded and extended the original 6,500 foot runways to 7,300 feet to handle bombardment aircraft. The Army also added taxiways, a night lighting system, a power control building and enclosed the field with a barbed wire fence. By fall of 1943, the airfield was a sub-base of Hamilton Field, California, in the Fourth Air Force. With administration provided by Hamilton Field and without housing facilities, Siskiyou County Airport did not become a key installation.

On 1 May 1944, the Air Corps reassigned the airfield to the Chico Army Air Field (AAF). It remained an unmanned auxiliary field and primarily functioned as an emergency landing field for disabled aircraft or "itinerant army planes". Use of the airport in 1944 seems modest, as inspections found mud from cattle on the field at various times. On 15 October that year, Chico AAF transferred jurisdiction of the Siskiyou County Airport to the Air Technical Service Command (ATSC). On 3 November 1944, the Interdepartmental Air Traffic Control Board approved use of field by Siskiyou County as an alternate airport for commercial scheduled air carrier operations. On 30 December 1944, the ATSC declared the Army Air Forces no longer needed the airport and recommended it for disposal. On 23 January 1945, the ATSC placed the airport on inactive status and subleased portions of the site for agricultural purposes.

Following the initial military use, commercial operations of the airport continued. These included fire fighting operations by the U.S. Forest Service and flying small private aircraft.

Military use resumed on 13 September 1962, when the U.S. Air Force met with the Siskiyou County board of supervisors. The Siskiyou County Airport seemed "ideally suited for use as a dispersal site because it was well outside of any targeted or fallout area." The U.S. Air Force subsequently leased and acquired joint use of the runways and exclusive use of other portions of the airport on 22 October 1962. A few weeks later, aircraft from the 83rd and 84th Interceptor Squadrons from Hamilton Air Force Base (AFB), California moved in as part of the Cuban Crisis dispersal operation. No regular training missions were scheduled for the airport during this period.

By 15 January 1964, these squadrons were replaced by the 82nd Fighter Interceptor Squadron from Travis AFB, California. In December of that year the Air Force began improvements to the site including runway maintenance and the construction of a Mobile Control Tower, along with support facilities for radar. Other facilities included a runway overrun, operations apron, approach lighting, four aircraft shelters, a maintenance dock, utilities, an ammunition storage magazine and roadways. These facilities were considered complete on 17 December 1965.

Careful review of the historical references, including the audited real estate map, show that the reference to Montague Municipal Airport is actually the Siskiyou County Airport, located four miles northeast of Montague (Hamilton Field Air Base Area 1944; Chico AAF 1944a, b; U.S. Army Construction Division 1944; AAF Aeronautical Chart Service 1945).

The aircraft dispersal program at Siskiyou County Airport was transferred to the 28th Air Division, Hamilton AFB on 1 October 1965. The Air Force ended their dispersal program at Siskiyou County Airport by 19 July 1971, reporting the land owned in fee excess to the General Services Administration (GSA). The Air Force terminated the lease with the county on 15 May 1972, coinciding with GSA conveying the remaining parcels and easements to the county. The Siskiyou County Airport currently continues in use by commercial air operations.

The archive search uncovered no information relating to ordnance use or storage at the airport during World War II. Historical documentation does not mention any firing ranges, storage magazines or other ordnance structures at the airport during this time period.

Between 1962 and 1971, the U.S. Air Force maintained facilities at the Siskiyou County Airport as part of their Fighter Interceptor base dispersal program. Although a detachment of personnel maintained these facilities, historical documentation does not reveal the presence of any type of shooting range at the field. Weapons qualification and aviation ordnance training for detachment and transient personnel would have occurred at other ranges in the area.

The Air Force built a 19 bay ordnance storage magazine at the airport on the abandoned northeast/southwest runway. Reviewed records do not indicate the specific types of ammunition stored in this bunker. Assumably it encompassed typical ordnance for the interceptors of the time, which included gun ammunition (20mm), air-to-air missiles and possibly bombs and rockets. Stores would have been downloaded from aircraft during maintenance or ready ordnance stored at the facility for use by the dispersed aircraft during a potential crisis. The magazine would have also held a variety of Cartridge Actuated Devices (CADs) and Propellant Actuated Devices (PADs) used in aircraft subsystems for activating fire extinguishers, canopy releases, ejection seats and other functions.

Off the end of the abandoned runway, real estate maps denote an area as "Exclusive Use Ammo Disposal Area". Documentation did not reveal any other specifics regarding the use of this area. Analysis of the aerial photography distinguished a circular area about 400 foot in diameter with a center discoloring. The site inspection located a slight depression at this location with magnetometer "hits" at depth. They also found a piece of fragmentation from OE at this location. A farmer confirmed the presence of a pit used by the Air Force to destroy munitions. He has since filled it in to ease cultivation.

The archive search uncovered no documentation relating to CWM at Siskiyou County Airport. The archive search team found no indication that Siskiyou County Airport conducted CWM training, storage or disposal.

2.3 REAL ESTATE

The military use of **Siskiyou County Airport** consisted of a total of 985.44 acres of real estate. Beginning in November 1942, the U.S. Army Air Corps acquired acreage for an

outlying base as follows:

- 963.37 acres lease land from Siskiyou County.
- 4.41 acres easements licenses from Montague Water Conservation District, Siskiyou County and private land owners.

This resulted in a total World War II era land use of 967.78 acres. The U.S. Army Air Corps declared the property surplus to their needs on 20 October 1944 and terminated the lease and all the licenses on 31 December 1945.

By lease DA04-167-Eng-2695, the U.S. Air Force reacquired 267.23 acres of the airport from Siskiyou County beginning in 22 October 1962. This lease also provided for joint civilian and Air Force use of an additional 325.73 acres of runways and taxiways. Additionally, between April 1965 and September 1966, the Air Force acquired another 3.81 acres in fee and 13.85 acres in easements from private owners. This results in a total of 610.62 acres of military use between 1962 and 1972. All of this acreage is included in the original 1940s era 967.78 acres, except for tracts 101 through 103. These tracts included 3.81 acres in fee and 13.85 acres in easements for a total of 17.66 acres. Thus the total FUDS real estate value is 985.44 acres.

The U.S. Air Force reported the 3.81 fee acres excess to the General Services Administration on 19 July 1971. GSA conveyed this land, as well as the 13.85 acres in easements, to Siskiyou County by Quit Claim Deed on 15 May 1972. The Air Force terminated their lease for Siskiyou County Airport on the same day.

The real estate figures in the INPR only represents the non-joint use acreage acquired real estate in the 1960s and does not include the additional 325.73 acres of runways and taxiways or all the property of the 1940s era use. Based on a review of available real estate documents, the U.S. Air Force released Siskiyou County Airport with no restrictive covenants or land use restrictions.

The archive search did not identify any additional areas of potential or undocumented military ownership or land use associated with Siskiyou County Airport.

This investigation did not reveal any significant past ownership of Siskiyou County Airport with relationship to OE or CWM.

Records reviewed indicate the current property owner of the site remains Siskiyou County.

2.4 SITE INSPECTION

Shirley M. Hamilton, Gregg E. Kocher and Randal S. Curtis of the St. Louis District Corps of Engineers, performed site inspections of the former Siskiyou County Airport on 2 and 15 September 1998. Appendix I of the Findings Volume of this ASR includes present site photographs, and section L-2 includes the trip report memorandum from the site inspection. The following paragraphs contain a synopsis of the site inspection.

On 2 September 1998 at 0800, Gregg E. Kocher and Randal S. Curtis met with Tom Anderson, the Transportation Services Manager & Director of Airports for Siskiyou County. He's worked for the county's transportation group since 1988 and agreed to accompany the team to the site, northwest of Montague. They stopped by the County's maintenance shops and talked to an employee who had a brother who worked at the base. He remembered dropping his brother off at the gate on the main road and that he walked in. He pointed out other off installation housing used by Air Force personnel. Next to the maintenance shops is the former barracks building of the site, currently occupied by the California Conservation Corps.

The former ordnance storage area was located on the abandoned northeast-southwest runway. The area is still fenced in, with a single fence line. The ordnance was stored in one building (number 411) with 19 bays. Bays 1 to 18 are on opposite sides of the structure, which was about 50 feet wide. The building expands to 75 feet wide for Bay 19, which has doors on both sides. The ordnance storage area did not have the institutional controls present for the permanent storage of special weapons. The storage magazine is currently being used for maintenance and storage, primarily as evidence lockers for the local law enforcement agencies.

Tom stopped and talked to several people that work at the airport, including Ed Medlin (?). He recently retired from the County but now operates a small commercial aviation business. He began working for the County in the 1960s. He recalled that there were about ten planes stationed at the site, generally F-4s. He confirmed the joint use of the facility by the Air Force and the County, each with facilities at opposite ends of the airfield. The week before, a former veteran stopped by and retold a story about how the Air Force would transport nuclear weapons with armed escort to the site, disguised in Budweiser delivery trucks. He couldn't assure the accuracy of the anecdote but another denizen of the airport had also heard this story the previous week.

A return site inspection was made by Gregg Kocher and Shirley M. Hamilton on 16 September to inspect the Ammunition Disposal Area. The team met again with Tom Anderson, who guided them to the former ammunition disposal area. The ammunition disposal area was a circular area near the end of the abandoned runway on real estate maps. The area is flat and sparsely vegetated, with the exception of a shallow depression at N 41°

46' 36.85", W 122° 27' 37.17"; 10T EM 44850 25147². In the past the field has been tilled and planted with alfalfa. The depression is roughly 12 feet by 8 feet and no more than 8 inches deep.

Using a Schonstedt magnetometer (Model GA-72CV), Mr. Kocher proceeded to randomly search the area for anomalies. A very strong signature was identified within the shallow depression. The signature covered an area approximately 18 inches by 8 inches, with no metal visible on the surface. Since the tilling of the field reaches to a depth of six or eight inches, the anomaly is reasoned to be a foot or more in depth. It was conjectured that the hit within the depression may be the remains of a burn barrel or burial pit residue.

Moderate "hits" near the depression located a twisted piece of light-cased fragmentation (about 2.3mm thick) and an eye bolt from a piece of farm machinery on the surface. The piece of fragmentation is approximately six inches long and two inches wide at its widest point. It almost certainly was involved in an explosion, possibly from an ejection seat thruster, though this is only conjecture.

Another area of strong hits was located about 40 feet south-southeast from the depression, at coordinates: N 41° 46' 36.26", W 122° 27' 37.10"; 10T EM 44852 25129. It had several moderate hits scattered about and one localized strong hit. Another localized strong hit was found just a few inches from the corner of the concrete apron and may be related to the construction of the apron.

In addition to the anomalies described above, there were two gopher holes which gave a moderate signature when the magnetometer was inserted. It could not be ascertained if this was due to an actual ferrous metal object or disturbance in the magnetic field. In addition, several weak hits were found, which may have been nails or tiny pieces of fragmentation.

The team discussed their findings with Mr. Anderson, who is concerned about potential problems, in light of the fact that the airfield has entered into discussion with a soaring club to use the fields near the disposal area as a staging ground for glider aircraft.

On 22 September, Mr. Anderson called the ASR team and relayed a recent conversation he had with the farmer who cultivates the field, Rex Houghton. Mr. Houghton remembers a pit in the ammo disposal area that the Air Force used to destroy munitions. After the Air Force left, he filled it in with dirt to aid in cultivating the field.

2.5 CONFIRMED ORDNANCE PRESENCE

The archive search report confirmed that the U.S. Air Force stored and disposed of munitions at the former Siskiyou County Airport. The site inspection confirmed the presence

² All coordinates were taken with a AN/PSN-11 PLGR GPS (Global Positioning System) receiver using mapping datum North American 1927.

of a piece of ordnance debris from the disposal activity. Aerial photography analysis distinguished a scarred circular area approximately 400 foot in diameter at the Ammunition Disposal Area, equalling about 3 acres. However, the archive search did not uncover any direct evidence of a current OE hazard at the former Siskiyou County Airport.

2.6 POTENTIAL ORDNANCE PRESENCE

Analysis of the information gathered during the archive search identifies the following areas as having been related to OE at the former Siskiyou County Airport:

Area	Acreage (est.)	OE Related Function	OE Potential (confirmed, hearsay, none except for past use)
ordnance storage magazine	< 1	Storage of various undocumented conventional ordnance.	None, except for past use.
Ammunition Disposal Area	3	disposal of undocumented OE items.	Confirmed OE Debris located during site inspection.

2.7 UNCONTAMINATED AREAS

The archive search revealed no other areas within the 985.44 acres of the former Siskiyou County Airport except those listed in 2.6 as having an OE and CWM hazard potential. The information gathered during the archive search indicated that the military did not store, use, or dispose of chemical warfare materials at Siskiyou County Airport.

2.8 SITE INFORMATION ANALYSIS

The archive search uncovered evidence that the U.S. military both stored and disposed of conventional ordnance at Siskiyou County Airport. The site has two ordnance related features: a 19 bay ordnance storage magazine and an Ammunition Disposal Area. The archive search did not locate any evidence of a firing range associated with the site. The specific types of ordnance and explosives associated with the site were undocumented but assumably encompassed typical ordnance for the interceptors of the 1960s, including gun ammunition (20mm), air-to-air missiles and possibly bombs and rockets. The site would have also held a variety of Cartridge Actuated Devices (CADs) and Propellant Actuated Devices (PADs).

The former ordnance storage magazine remains in use for maintenance and storage, primarily as evidence lockers for the local law enforcement agencies. Documentation did not reveal

specifics concerning the use of the Ammunition Disposal Area. Analysis of the aerial photography distinguished a circular area about 400 foot in diameter with a center discoloring. The site inspection located a slight depression with magnetometer "hits" at depth and a piece of fragmentation from OE at this location. The depression is about 1,250 feet from the magazine and about 800 feet from the border. Based on safety distances, the disposal activities most likely would have been tamped, subsurface detonations, as well as the possible burning of expired shelf-life CADs/PADs. The explosive limit for detonations would have been low, probably in the 5-10 lb. range. A farmer confirmed the presence of a pit used by the Air Force to destroy munitions, that he filled in to ease cultivation.

Based on this investigation, no evidence surfaced concerning the presence of special weapons at Siskiyou County Airport.

Based on this investigation, no evidence surfaced of chemical warfare materials storage, usage, or disposal at Siskiyou County Airport. Furthermore, the mission of Siskiyou County Airport does not imply the presence of CWM. Research discovered no historical records associating CWM with the site. Interviews did not disclose any correlation of CWM with the site. Additionally, the site inspection did not uncover any evidence of CWM hazards.

3.0 RECOMMENDATIONS

3.1 SUMMARY OF RECOMMENDATIONS

Appendix A contains the Risk Assessment Procedures for Ordnance and Explosives Sites form. Using the information available, this form resulted in a score of **RAC 4** for Siskiyou County Airport.

RAC 4 indicates further consideration by CEHNC. Further action recommendations into ordnance and explosives at Siskiyou County Airport will originate from CEHNC. Further action can include an expanded site investigation to delineate areas of subsurface OE potential or an Engineering Evaluation/Cost Analyst (EE/CA).

3.2 OTHER ENVIRONMENTAL ACTIONS

Other areas of Siskiyou County Airport identified as potential environmental concerns involve investigating the site for underground storage tanks, transformers and contamination from the former fuel storage area. The Sacramento of the Corps of Engineers investigates and manages these additional environmental concerns at Siskiyou County Airport.

3.3 PRELIMINARY ASSESSMENT ACTIONS

The archive search identified no additional preliminary assessment actions required as a result of investigating Siskiyou County Airport.

APPENDIX A

RISK ASSESSMENT CODE PROCEDURE FORM

ETL 1110-1-165
 25 November 1997
 Previous editions are obsolete

RISK ASSESSMENT PROCEDURE FOR
 ORDNANCE AND EXPLOSIVES (OE) SITES

Site Name <u>Siskiyou County Airport</u>	Rater's Name <u>Randal Curtis / Gregg E. Kocher</u>
Site Location <u>Siskiyou County, CA</u>	Phone No. <u>(314) 331-8786 / (314) 331-8790</u>
DERP Project# <u>J09CA095003</u>	Organization <u>CEMVS-ED-P</u>
Date Completed <u>21 September 1998</u>	RAC Score <u>4</u>

OE RISK ASSESSMENT:

This risk assessment procedure was developed in accordance with MIL-STD 882C and AR 385-10. The Risk Assessment Code (RAC) score will be used by the U.S. Army Engineering and Support Center, Huntsville (USAESCH), Ordnance and Explosives Team (CEHNC-OE) to prioritize the remedial actions(s) at Formerly Used Defence Sites (FUDS). The risk assessment should be based on the best available information resulting from records searches, reports of Explosive Ordnance Disposal (EOD) Detachment actions, field observations, interviews, and measurements. This information is used to assess the risk involved based on the potential OE hazards identified at the site. The risk assessment is composed of two factors, **hazard severity and hazard probability**. Personnel involved in visits to potential OE sites should view the CEHNC-OE videotape entitled "A Life Threatening Encounter: OEW."

Part I. **Hazard Severity**. Hazard severity categories are defined to provide a qualitative measure of the worst credible event resulting from personnel exposure to various types and quantities of unexploded ordnance.

TYPE OF ORDNANCE <u>(Circle all that apply)</u>	VALUE
A. Conventional Ordnance and Ammunition:	
Medium/large caliber (20mm and larger)	10
Bombs, Explosive	10
Grenades, hand or rifle, explosive	10
Landmine, explosive	10
Rockets, guided missile, explosive	10
Detonators, blasting caps, fuzes, boosters, bursters	6
Bombs, practice (w/spotting charges)	6
Grenades, practice (w/spotting charges)	4
Landmine, practice (w/spotting charges)	4
Small arms, complete round (.22 cal - .50 cal)	1
Small arms, expended	0
Conventional ordnance and ammunition (largest single value)	<u>6</u>

What evidence do you have regarding conventional unexploded ordnance? The site inspection of the ammunition disposal area located a piece of fragmentation, assumably from a ejection seat thruster. The Schonstedt magnetometer registered several strong hits of items at depth. Disposal activities are thought to have been limited to tamped, subsurface detonations, with a low explosive limit, probably in the 5-10 lb. range at this site. The site inspection did not locate evidence of OE hazards at other locations.

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B. Pyrotechnics (for munitions not described above)	VALUE
Munition (containers) containing White Phosphorus (WP) or other Pyrophoric Material (i.e., Spontaneously Flammable)	10
Munition Containing A Flame or Incendiary Material (i.e., Napalm, Triethylaluminum Metal Incendiaries)	6
Flares, Signals, Simulators, Screening Smokes (other than WP)	4
Pyrotechnics <u>(Select the largest single value)</u>	<u>0</u>

What evidence do you have regarding pyrotechnics? None. The archive search did not uncover evidence that this site used or stored these materials.

C. Bulk High Explosives (HE) (Not an integral part of conventional ordnance; uncontainerized.)	VALUE
Primary or initiating explosives (Lead Styphnate, Lead Azide, Nitroglycerin, Mercury Azide, Mercury Fulminate, Tetracene, etc.)	10
Demolition charges	10
Secondary explosives (PETN, Compositions A, B, C Tetryl, TNT, RDX, HMX, HBX, Black Powder, etc.)	8
Military Dynamite	6
Less Sensitive Explosives (Ammonium Nitrate, Explosive D, etc.)	3
High Explosives <u>(Select the largest single value)</u>	<u>0</u>

What evidence do you have regarding bulk explosives? None. The archive search did not uncover evidence that this site used or stored these materials.

D. Bulk Propellants (not an integral part of rockets, solid or liquid propellants)	VALUE
Solid or Liquid Propellants	6
Propellants	<u>0</u>

What evidence do you have regarding bulk propellants? None. The archive search did not uncover evidence that this site used or stored these materials.

E. Chemical Warfare Material (CWM) and Radiological Weapons:

	VALUE
Toxic chemical agents (Choking, Nerve, Blood, Blister)	25
War Gas Identification sets	20
Radiological	15
Riot Control Agents (Vomiting, Tear)	5
Chemical and Radiological (Select the largest single value)	<u>0</u>

What evidence do you have regarding chemical/radiological? None. The archive search did not uncover evidence that this site used or stored these materials.

Total Hazard Severity Value
(Sum of the Largest Values for A through E--Maximum of 61) 6
Apply this value to Table 1 to determine Hazard Severity Category.

TABLE 1

HAZARD SEVERITY*

<u>Description</u>	<u>Category</u>	<u>Hazard Severity Value</u>
CATASTROPHIC	I	21 and/or greater
CRITICAL	II	10 to 20
MARGINAL	III	5 to 9
NEGLIGIBLE	IV	1 to 4
**NONE	V	0

*Apply Hazard Severity Category to Table 3

**If Hazard Severity Value is 0, you do not need to complete Part II of this form. Proceed to Part III and use a RAC Score of 5 to determine your appropriate action.

Part II. Hazard Probability. The probability that a hazard has been, or will be, created due to the presence and other rated factors of unexploded ordnance or explosive materials on a formerly used Department of Defense (DOD) site.

AREA, EXTENT, ACCESSIBILITY OF OE HAZARD
 (Circle all values that apply)

A. Location of OE Hazards

	VALUE
On the surface	5
Within Tanks, Pipes, Vessels or Other confined locations	4
Inside walls, ceilings, or other Building/Structure	3
Subsurface	2
Location (<u>Select the single largest value</u>)	<u>2</u>

What evidence do you have regarding location of OE? Potential OE hazards exist in the form of failed subsurface detonations at the ammunition disposal area.

B. Distance to nearest inhabited location structure likely to be at risk from OE hazard (roads, park, playground, building).

	VALUE
Less than 1,250 feet	5
1,250 feet to 0.5 mile	4
0.5 mile to 1.0 mile	3
1.0 mile to 2.0 mile	2
Over 2 miles	1
Distance (<u>Select the single largest value</u>)	<u>4</u>

What are the nearest inhabited structures/buildings? The nearest buildings are the former ordnance storage magazine and several associated buildings located about 1,250 feet away. They are used for storage and by the maintenance department.

C. Number(s) of building(s) within a 2 mile radius measured from the OE hazard area, not the installation boundary.

	VALUE
26 and over	5
16 to 25	4
11 to 15	3
6 to 10	2
1 to 5	1
0	0
Number of Buildings (Select the single largest value)	<u>5</u>

Narrative The potential OE hazard exists at the ammunition disposal area. Though no building are in the immediate area there are over 26 buildings within 2 miles.

D. Types of Buildings (within a 2 mile radius)

	VALUE
Educational, Child Care, Residential, Hospitals, Hotels, Commercial, Shopping Centers	5
Industrial, Warehouse, etc.	4
Agricultural, Forestry, etc.	3
Detention, Correctional	2
No Buildings	0
Types of Buildings (Select the single largest value)	<u>5</u>

Describe the types of buildings: Although the buildings in the area are primarily light industrial in nature, there are private residences within two miles of the potential OE hazard.

or

Generally speaking, the area contains no buildings except for an occasional barn or homestead which remain outside the radius.

E. Accessibility to site refers to access by humans to ordnance and explosives. Use the following guidance: VALUE

No barrier nor security system 5

Barrier is incomplete (e.g. in disrepair or does not completely surround the site). Barrier is intended to deny egress from the site, as for a barbed wire fence for grazing. 4

A barrier, (any kind of fence in good repair) but no separate means to control entry. Barrier is intended to deny access to the site. 3

Security guard, but no barrier 2

Isolated site 1

A 24-hour surveillance system (e.g., television monitoring or surveillance by guards or facility personnel continuously monitors and controls entry; or, an artificial or natural barrier (e.g., fence combined with a cliff), which completely surrounds the area; and, a means to control entry at all times through the gates, or other entrances (e.g., an attendant, television monitors, locked entrances, or controlled roadway access to the area). 0

Accessibility (Select the single largest value) 4

Describe the site accessibility. Barriers are incomplete, meant to deny ready access to the airfield.

F. Site Dynamics - This deals with site conditions that are subject to change in the future, but may be stable at the present. Examples would be excessive soil erosion on beaches or streams, increasing land development that could reduce distances from the site to inhabited areas or otherwise increase accessibility.

VALUE

Expected 5

None Anticipated 0

Site Dynamics (Select value) 0

Describe the site dynamics. The planned potential use of the disposal area as a staging ground for glider aircraft will have less dynamic impact on unearthing potential OE than current agricultural practices.

Total Hazard Probability Value
(Sum of Largest Values for A through F—Maximum of 30) 20

Apply this value to Hazard Probability Table 2 to determine
Hazard Probability Level.

TABLE 2
HAZARD PROBABILITY

<u>Description</u>	<u>Level</u>	<u>Hazard Probability Value</u>
FREQUENT	A	27 or greater
PROBABLE	B	21 to 26
OCCASIONAL	C	15 to 20
REMOTE	D	8 to 14
IMPROBABLE	E	less than 8

* Apply Hazard Probability Level to Table 3.

Part III. Risk Assessment. The risk assessment value for this site is determined using the following Table. Enter the results of the hazard probability and hazard severity values.

TABLE 3

Probability Level	FREQUENT <u>A</u>	PROBABLE <u>B</u>	OCCASIONAL <u>C</u>	REMOTE <u>D</u>	IMPROBABLE <u>E</u>
Severity Category:					
CATASTROPHIC I	1	1	2	3	4
CRITICAL II	1	2	3	4	5
MARGINAL III	2	3	4	4	5
NEGLIGIBLE IV	3	4	4	5	5

RISK ASSESSMENT CODE (RAC)

- RAC 1 Expedite INPR, recommending further action by CEHNC - Immediately call CEHNC-OE-S (commercial 205-895-1582/1598).
- RAC 2 High priority on completion of INPR - Recommend further action by CEHNC.
- RAC 3 Complete INPR - Recommend further action by CEHNC.
- RAC 4 Complete INPR - Recommend further action by CEHNC.
- RAC 5 Usually indicates that no further action (NOFA) is necessary. Submit NOFA and RAC to CEHNC.

Part IV. Narrative. Summarize the documented evidence that supports this risk assessment. If no documented evidence was available, explain all the assumptions that you made.

The RAC score assigned to Siskiyou County Airport is 4.

Part I received a Hazard Severity Rating of "Marginal", Part II received a Hazard Probability Rating of "Occasional". According to table 3, these ratings convert to a Risk Assessment Code of 5.

APPENDIX B

**ABBREVIATIONS, ACRONYMS
AND BREVITY CODES**

ABBREVIATIONS, ACRONYMS AND BREVITY CODES

AAF*	Army Air Field
AA	Anti-Aircraft
ACGIH	American Conference of Governmental Industrial Hygienist
AEC	Army Environmental Center
AFB	Air Force Base
AMC	Army Materiel Command
AP	Armor Piercing
APDS	Armor Piercing Discarding Sabot
APERS	Anti-personnel
AP-T	Armor Piercing-Tracer
ASR	Archive Search Report
aux	auxiliary
BD	Base Detonating
BD/DR	Building Demolition/Debris Removal
BLM	Bureau of Land Management
BRAC	Base Realignment and Closure
CAA	Civil Aeronautics Administration
CADD	Computer-Aided Drafting and Design
CADs	Cartridge Actuated Devices
cal	Caliber
CBDA	Chemical and Biological Defense Agency
CBDCOM	Chemical and Biological Defense Command
CE	Corps of Engineers
CEHNC	Corps of Engineers, Huntsville Engineering and Support Center
CEMVS	Corps of Engineers, Mississippi Valley-St. Louis District
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act
CERFA	Community Environmental Response Facilitation Act
CFR	Code of Federal Regulations
cfs	cubic feet per second
COE	Chief of Engineers
ctg	Cartridge
CWM	Chemical Warfare Material
CWS*	Chemical Warfare Service
CX	Center of Expertise
DA	Department of the Army
DARCOM	Development and Readiness Command
DEET	Diethyltoluamide
DERA	Defense Environmental Restoration Account
DERP	Defense Environmental Restoration Program
DoD	Department of Defense
DOE	Department of Energy
DOI	Department of Interior
EE/CA	Engineering Evaluation/Cost Analysis

EIS	Environmental Impact Statement
EOD	Explosive Ordnance Disposal
EPA	Environmental Protection Agency
ERDA	Environmental Restoration Defense Account
FDE	Findings and Determination of Eligibility
FS	Feasibility Study
FUDS	Formerly Used Defense Sites
GIS	Geographic Information System
GPS	Global Positioning Satellite
GSA	General Services Administration
HE	High Explosive
HEAT	High Explosive Anti-Tank
HEI	High Explosive Incendiary
HEP	High Explosive Plastic
HTRW	Hazardous Toxic and Radioactive Waste
HTW	Hazardous and Toxic Waste
IAS	Initial Assessment Study
INPR	Inventory Project Report
IRP	Installation Restoration Program
LD	Lyme Disease
MT	Mechanical Time
MTSQ	Mechanical Time Super Quick
NARA	National Archives and Records Administration
NAVSEA	Naval Sea Systems Command
NAS*	Naval Air Station
NCP	National Contingency Plan
NEW	Net Explosive Weight
NG	National Guard
NGVD	National Geographic Vertical Datum
NIMA	National Imagery and Mapping Agency
NMAS	National Map Accuracy Standards
NPL	National Priorities List
NOAA	National Oceanic and Atmospheric Administration
NOFA	No Further Action
NPRC	National Personnel Records Center
NRC	National Records Center
NWS	National Weather Service
OE	Ordnance and Explosives
OP	Ordnance Pamphlet
OSHA	Occupational Safety and Health Administration
PA	Preliminary Assessment
PADs	Propellant Actuated Devices
PD	Point Detonating
PIBD	Point Initiating, Base Detonating
PL	Public Law

QASAS	Quality Assurance Specialist Ammunition Surveillance
RA	Removal Action
RAC	Risk Assessment Code
RD	Remedial Design
RG	Record Group
RI	Remedial Investigation
RI/FS	Remedial Investigation/Feasibility Study
SARA	Superfund Amendments and Reauthorization Act
SSHO	Site Safety and Health Officer
SSHP	Site Safety and Health Plan
SWMU	Solid Waste Management Units
TECOM	Test Evaluation Command
TEU	United States Army Technical Escort Unit
TM	Technical Manual
TNT	Trinitrotoluene
TP	Target Practice
U.S.	United States (of America)
USA	United States Army
USACE	U.S. Army Corps of Engineers
USADACS	U.S. Army Defense Ammunition Center and School
USAESCH	U.S. Army Engineering and Support Center, Huntsville, AL
USAFHRA	U.S. Air Force Historical Research Agency
USATCES	U.S. Army Technical Center for Explosive Safety
USATHMA	U.S. Army Toxic and Hazardous Materials Agency
USC	United States Code
USDA	U.S. Department of Agriculture
USGS	U.S. Geological Survey
UST	Underground Storage Tanks
UXO	Unexploded Ordnance
WAA*	War Assets Administration
WD*	War Department
WNRC	Washington National Records Center

* designates a historic acronym

APPENDIX C
REPORT DISTRIBUTION LIST

REPORT DISTRIBUTION LIST

<u>Addressee</u>	<u>No. Copies</u>
Commander, U.S. Army Engineering and Support Center Huntsville, ATTN: CEHNC-ED-SY-O (D. MARDIS) P.O. Box 1600 Huntsville, Alabama 35807-4301	2
Commander, U.S. Army Engineer District, Sacramento ATTN: CESPCK-ED-EB 1325 J. Street Sacramento, CA 95814-2922	1
Project Manager Chemical Demilitarization, Non-Stockpile ATTN: SFAE-CD-NM Aberdeen Proving Ground, Maryland 21010-5401	1
Commander, U.S. Army Chemical & Biological Defense Command ATTN: AMSCB-CIH, Bldg. E5183 Aberdeen Proving Ground, MD 21010-5423	1
U.S. Army Technical Center for Explosives Safety ATTN: SIOAC-ESM Savanna, IL 61074-9639	1

PLATES

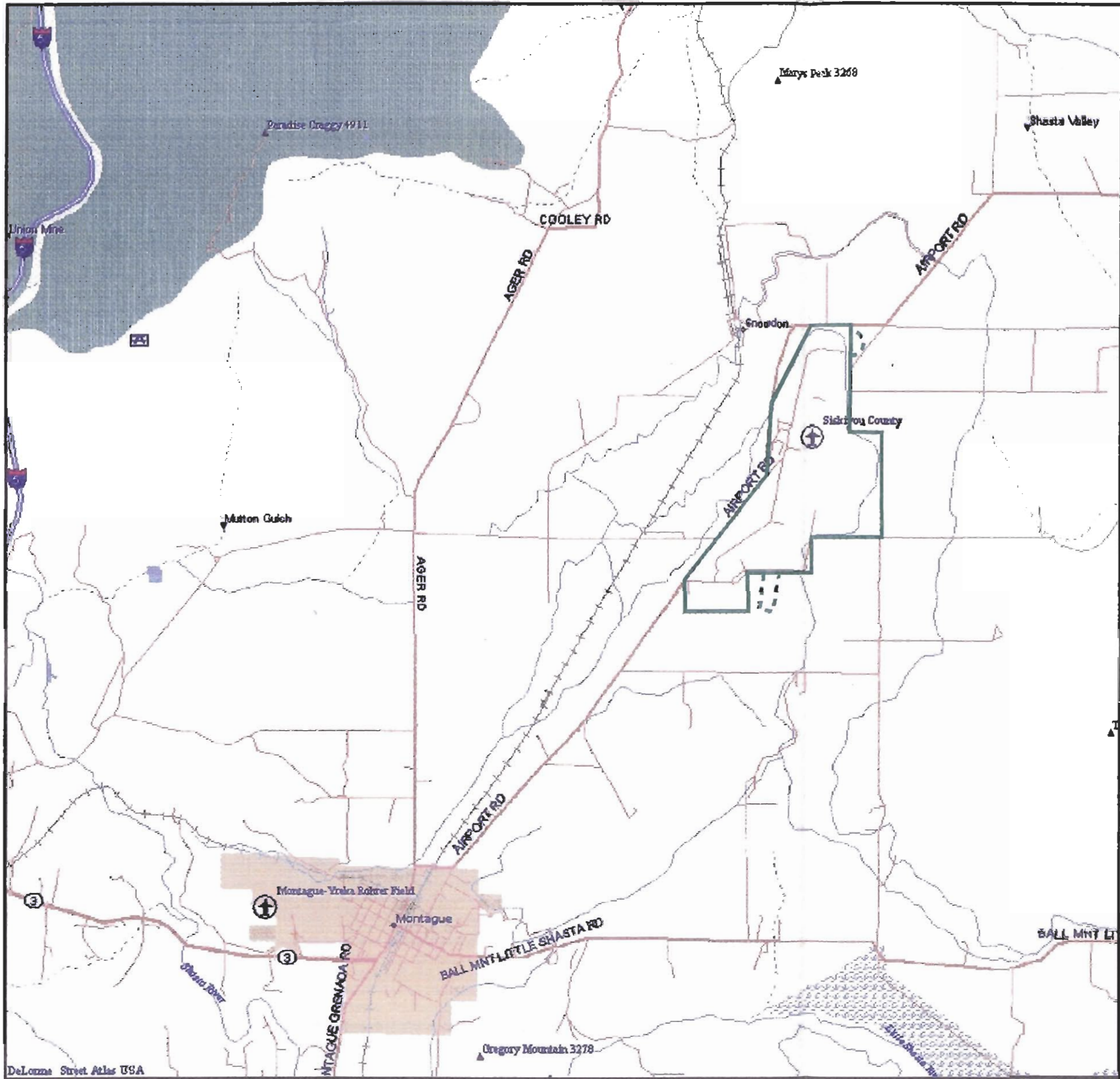
- 1 **Siskiyou County Airport - Vicinity Map**
- 2 **Siskiyou County Airport - Aerial Photograph-1955**
- 3 **Siskiyou County Airport - Aerial Photograph-1971**

Computer-Aided Design and Drafting (CADD) files are referenced to USGS quadrangles at a scale of 1:24,000. The quadrangles conform to National Map Accuracy Standards (NMAS), which provide that vertical accuracy on maps of such scale are within one (1) contour interval, and horizontal accuracies are within 60 feet.

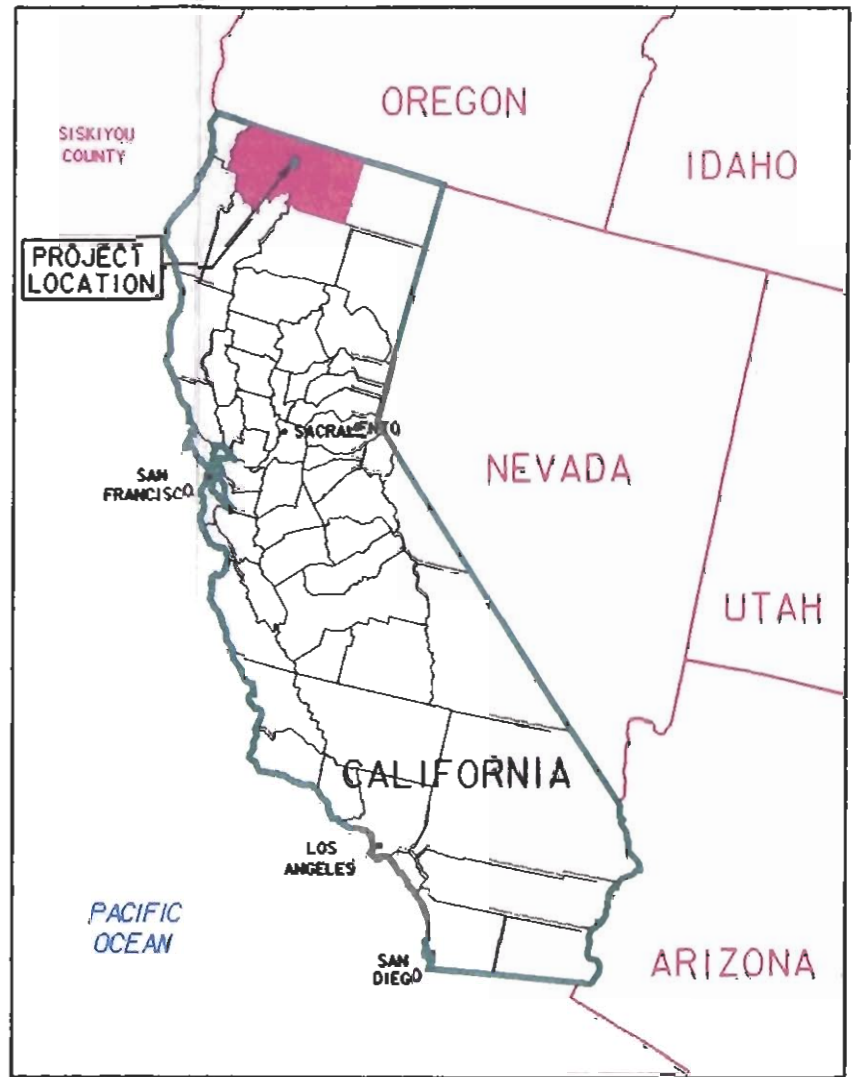
Minor distortions are associated with rectifying or georeferencing quadrangles to a known grid and projection, scanning historical documents (and subsequent vector-to-raster conversion), and rectifying the scanned historical maps to the georeferenced quadrangle.

Each of the above steps may introduce minute positional errors in the location of historical objects delineated on CADD drawings and plates. The caveat "NOT TO SCALE" will be used when the original historical map is not considered to conform to NMAS. Many of the historic maps used were hand-drawn or built on survey data that was inaccurate by modern standards. In general, historic maps used can have significant distortions, which are then magnified by the georeferencing process. CADD Drawings containing historic maps and drawings will have an accuracy no greater than that of the compilation accuracy of the historic document.

Furthermore, aerial photography used in CADD plates has not been orthorectified. While photography used in CADD plates has been rectified (georeferenced) to a coordinate system, the photos have not been corrected for photogrammetric displacements such as those due to topography or the attitude of the aircraft at the time of imaging. Therefore, locations of features detected on aerial photography are not exact due to the rectifying of both the image and the base map.



DeLorme Street Atlas USA



- 1942 - 1945 FUDS BOUNDARY
- 1962 - 1972 FUDS BOUNDARY BEYOND ORIGINAL FUDS





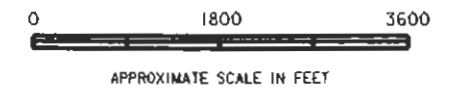
	U.S. ARMY CORPS OF ENGINEERS ST. LOUIS DISTRICT
<p>SISKIYOU COUNTY AIRPORT MONTAGUE, CALIFORNIA SISKIYOU COUNTY DERP-FUDS• J09CA095003 VICINITY MAP</p>	
PROJ. DATE: MAY, 1998	DATE OF MAP: 1997
16-SEP-1998 13:40	f:\csw\1009\980601\16siskiyounatalityy\dgn
PLATE NO.	1



NOTE: NO DISCERNABLE ORDNANCE OR EXPLOSIVE
FEATURES ON THE SITE.

LEGEND

-  1942-1945 FUDS BOUNDARY
-  FEATURE LOCATION



U.S. ARMY CORPS OF ENGINEERS
ST. LOUIS DISTRICT

SISKIYOU COUNTY AIRPORT
MONTAGUE, CALIFORNIA
SISKIYOU COUNTY
DERP-FUDS* J09CA095003
1955 AERIAL PHOTOGRAPH

PRG. DATE: MAY, 1990

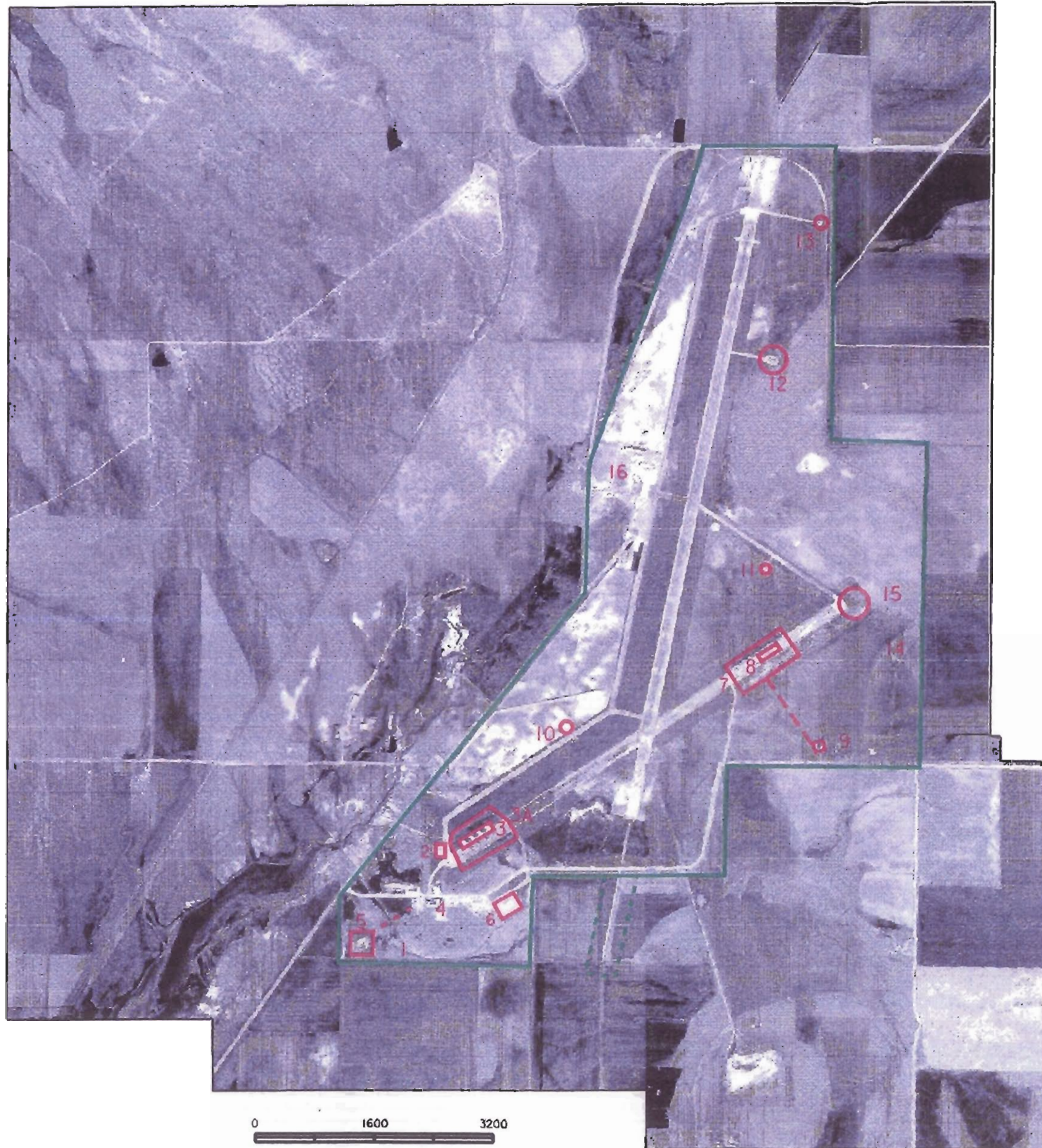
DATE OF PHOTO: 1955

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2



0 1600 3200
 APPROXIMATE SCALE IN FEET

KEY TO FEATURES:

FEATURE NUMBER	FEATURE DESCRIPTION
1	EXCLUSIVE MILITARY USE AREA
2	LARGE HANGER, OFF THE SOUTHERN TAXIWAY
3	FOUR SMALLER HANGERS OFF THE ABANDONED RUNWAY
3A	POLYGONAL DELINEATION ABOUT 400 BY 675 FEET IN SIZE SURROUNDING FOUR SMALL HANGERS.
4	INSTALLATION ADMINISTRATION, MAINTENANCE AND HOUSING AREA
5	APPROXIMATELY 250 FEET SQUARE BERMED AREA, SEWAGE LAGOON, WITH LINEAR DELINEATION FROM BUILDING AREA
6	FUEL STORAGE AREA
7	ORDNANCE STORAGE AREA, ABOUT 800 BY 400 FEET AT THE CENTRAL-NORTHEAST END OF THE ABANDONED RUNWAY; APPEARS TO BE FENCED.
8	19 BAY STORAGE MAGAZINE, APPROXIMATELY 50 FEET WIDE BY 250 FEET LONG, EXPANDING ON THE SOUTHWESTERN END TO ABOUT 75 FEET.
9	"STABILIZATION POND" OR SEWAGE LAGOON, ABOUT 100 FOOT SQUARE, WITH LINEAR DELINEATION FROM ORDNANCE STORAGE AREA.
10	POWER CHECK PAD
11	CONTROL TOWER
12	GCA
13	TRANSFORMER PAD FOR THE TACAN SYSTEM
14	LOCATION OF "AMMUNITION DISPOSAL AREA", NOTED ON REAL ESTATE TRACT MAP; THE FIELDS ARE BEING FARMED AND THERE ARE NO SIGNS OF THIS USE.
15	400 FOOT CIRCULAR DELINEATION NEAR APRON
16	CIVILIAN USE AREA

LEGEND

	1942 - 1945 FUDS BOUNDARIES
	1962 - 1972 FUDS BOUNDARY BEYOND ORIGINAL FUDS
	FEATURE LOCATION



U.S. ARMY CORPS OF ENGINEERS
 ST. LOUIS DISTRICT

SISKIYOU COUNTY AIRPORT
 MONTAGUE, CALIFORNIA
 SISKIYOU COUNTY
 DERP-FUDS • J09CA095003
 1971 AERIAL PHOTOGRAPH

PLATE NO. 3
 PERS. DATE: MAY, 1966
 16-SEP-1998 1443

DATE OF PHOTO: 1971

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PLATE NO. 3