

**FORM 12**

**Final Inspection Checklist  
(Part I)**

Date 4 June 2020

Contract No.: W9128F-16-D-0014

Project / Area of Inspection: Conduct DGM Surveys, DFW 5

*A. Definable Features of Work: Status of Inspection:*

All DGM Surveys have been conducted in accordance with SOP 551.01.4  
Transect segments were expanded outward to better define the boundary of the site.  
Selected anomalies were investigated.  
FCR modifying Target selection criteria is pending.

*I hereby certify, that to the best of my knowledge and belief, that the work inspected is complete and all materials and equipment used and work performed were completed in accordance with plans submitted and approved.*

\_\_\_\_\_  
*Contractor Quality Control Systems Manager*

*B. FINAL ACCEPTANCE IS APPROVED, SUBJECT TO THE CORRECTION OF THE PUNCHLIST ITEMS BELOW:*

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**Final Inspection Checklist  
(Part II)  
MEETING ATTENDANCE LIST**

Meeting: Final		Date: 4 June 2020
Name	Organization	Phone Number
Josh DeFrates, Senior Geophysicist	HGL	
Anthony Indelicato, UXOQCS	HGL	
Charles Nycum, QC Geophysicist	HGL	
Sonny Richardson, SUXOS	HGL	
Donnie Koetje, UXO III	HGL	
John Kochevko, OESS	USACE	

**FORM 12**

**Final Inspection Checklist  
(Part I)**

Date 4 June 2020

Contract No.: W9128F-16-D-0014

Project / Area of Inspection: Conduct Detection Survey Processing and Target Selection, DFW 6

A. *Definable Features of Work:* Status of Inspection:

All DGM Survey data has been processed in accordance with SOP 551.01.4

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*I hereby certify, that to the best of my knowledge and belief, that the work inspected is complete and all materials and equipment used and work performed were completed in accordance with plans submitted and approved.*

\_\_\_\_\_  
*Contractor Quality Control Systems Manager*

B. *FINAL ACCEPTANCE IS APPROVED, SUBJECT TO THE CORRECTION OF THE PUNCHLIST ITEMS BELOW:*

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**Final Inspection Checklist  
(Part II)  
MEETING ATTENDANCE LIST**

Meeting: Final		Date: 4 June 2020
Name	Organization	Phone Number
Josh DeFrates, Senior Geophysicist	HGL	
Anthony Indelicato, UXOQCS	HGL	
Charles Nycum, QC Geophysicist	HGL	
Sonny Richardson, SUXOS	HGL	
Donnie Koetje, UXO III	HGL	
John Kochevko, OESS	USACE	

**FORM 12**

**Final Inspection Checklist  
(Part I)**

Date 4 June 2020

Contract No.: W9128F-16-D-0014

Project / Area of Inspection: Anomaly Reacquisition, DFW 7

A. *Definable Features of Work:* Status of Inspection:

Reacquisition has been conducted in accordance with SOP 551.01.4

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*I hereby certify, that to the best of my knowledge and belief, that the work inspected is complete and all materials and equipment used and work performed were completed in accordance with plans submitted and approved.*

\_\_\_\_\_  
*Contractor Quality Control Systems Manager*

B. *FINAL ACCEPTANCE IS APPROVED, SUBJECT TO THE CORRECTION OF THE PUNCHLIST ITEMS BELOW:*

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**Final Inspection Checklist  
(Part II)  
MEETING ATTENDANCE LIST**

Meeting: Final		Date: 4 June 2020
Name	Organization	Phone Number
Josh DeFrates, Senior Geophysicist	HGL	
Anthony Indelicato, UXOQCS	HGL	
Charles Nycum, QC Geophysicist	HGL	
Sonny Richardson, SUXOS	HGL	
Donnie Koetje, UXO III	HGL	
John Kochevko, OESS	USACE	





**Final Inspection Checklist  
(Part II)  
MEETING ATTENDANCE LIST**

Meeting: Final		Date: 4 June 2020
Name	Organization	Phone Number
Josh DeFrates, Senior Geophysicist	HGL	
Anthony Indelicato, UXOQCS	HGL	
Charles Nycum, QC Geophysicist	HGL	
Sonny Richardson, SUXOS	HGL	
Donnie Koetje, UXO III	HGL	
John Kochevko, OESS	USACE	

**FORM 12**

**Final Inspection Checklist  
(Part I)**

Date 4 June 2020

Contract No.: W9128F-16-D-0014

Project / Area of Inspection: MPPEH/MEC Handling, Certification and Disposal, DFW 9

**A. Definable Features of Work: Status of Inspection:**

No MEC was recovered during this project.  
All MPPEH was processed and disposed of in accordance with EM 385-1-97 and SOP 504.01  
UXOQCS verified that all MD items were free of Explosive and HAZMAT hazards.  
All MPPEH items were inspected, verified and certified on Form 1348-1A to be free of explosive hazards and classified as MDAS.  
All MDAS was shipped to DemilMetals in a secure sealed container.

***I hereby certify, that to the best of my knowledge and belief, that the work inspected is complete and all materials and equipment used and work performed were completed in accordance with plans submitted and approved.***

\_\_\_\_\_  
*Contractor Quality Control Systems Manager*

**B. FINAL ACCEPTANCE IS APPROVED, SUBJECT TO THE CORRECTION OF THE PUNCHLIST ITEMS BELOW:**  
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**Final Inspection Checklist  
(Part II)  
MEETING ATTENDANCE LIST**

Meeting: Final		Date: 4 June 2020
Name	Organization	Phone Number
Josh DeFrates, Senior Geophysicist	HGL	
Anthony Indelicato, UXOQCS	HGL	
Charles Nycum, QC Geophysicist	HGL	
Sonny Richardson, SUXOS	HGL	
Donnie Koetje, UXO III	HGL	
John Kochevko, OESS	USACE	







**Final Inspection Checklist  
(Part II)  
MEETING ATTENDANCE LIST**

Meeting: Final		Date: 4 June 2020
Name	Organization	Phone Number
Josh DeFrates, Senior Geophysicist	HGL	
Anthony Indelicato, UXOQCS	HGL	
Charles Nycum, QC Geophysicist	HGL	
Sonny Richardson, SUXOS	HGL	
Donnie Koetje, UXO III	HGL	
John Kochevko, OESS	USACE	

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(Part I)**

Date 4 June 2020

Contract No.: W9128F-16-D-0014

Project / Area of Inspection: Demobilization, DFW 11

**A. Definable Features of Work: Status of Inspection:**

Sealed, secure MDAS container has been shipped to DemilMetals. A Form 1348-A1 has been generated.  
All equipment has been removed from project site.  
All site personnel have demobed.  
Gate is secured with our combination lock 9510. All other gate locks remain undisturbed.  
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***I hereby certify, that to the best of my knowledge and belief, that the work inspected is complete and all materials and equipment used and work performed were completed in accordance with plans submitted and approved.***

\_\_\_\_\_  
*Contractor Quality Control Systems Manager*

**B. FINAL ACCEPTANCE IS APPROVED, SUBJECT TO THE CORRECTION OF THE PUNCHLIST ITEMS BELOW:**  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_



**Final Inspection Checklist  
(Part II)  
MEETING ATTENDANCE LIST**

Meeting: Final		Date: 4 June 2020
Name	Organization	Phone Number
Josh DeFrates, Senior Geophysicist	HGL	
Anthony Indelicato, UXOQCS	HGL	
Charles Nycum, QC Geophysicist	HGL	
Sonny Richardson, SUXOS	HGL	
Donnie Koetje, UXO III	HGL	
John Kochevko, OESS	USACE	

## Field Work Variance Request Form

PROJECT NO.: AT3001

DATE: 5.28.2020

VARIANCE NO.: CHAPP-01

PROJECT NAME: RI/FS Burning Grounds, Sanitary Landfill, and Pistol Range Areas (Remaining Property of the U.S. Government) Cornhusker Army Ammunition Plant, Grand Island, Nebraska

PRESENT REQUIREMENTS:

REQUESTED BY: HGL

QAPP Worksheets #11A (Step 2) and Worksheet #17 Sections 17A.1, 17A.3.5.2, and 17A.3.7 discuss the number of targets for intrusive investigation at the South Fuze Destruction Area (SFDA) and the Abandoned Burning Area (ABA).

Section 17.A.1:

To more accurately delineate the boundaries of the SFDA, digital geophysical mapping (DGM) data will be collected along parallel transect segments that surround a portion of the existing 375-foot by 375-foot site as shown in Figure 2.11 (Attachment A). The total length of each transect is approximately 1,000 feet and each transect is separated by a distance of 50 feet. DGM data will be collected over approximately 3,000 feet of transects (0.2 acres). Based on the anomaly density identified during the previous DGM investigation, a maximum of 50 targets along the transects are anticipated to be investigated to refine the boundary of the site. If munitions and explosives of concern (MEC) or munitions debris (MD) are identified on a localized transect that bounds the site, the transect segment in the localized area will be expanded outward and the process repeated until no MEC or MD are identified.

To more accurately delineate the boundaries of the ABA, full coverage DGM data will be collected over the previously identified conductivity anomaly and include a 50-foot buffer on each side of the conductivity anomaly as shown in Figure 2.12 (Attachment A). Based on the low metallic anomaly density estimate documented in the 1996 Remedial Investigation/Feasibility Study (RI/FS) report, a maximum of 25 targets are anticipated to characterize the site. Similar to the approach at the SFDA, if MEC or MD are identified near the boundaries of the site, DGM transect segments in the localized area will be expanded outward and anomalies will be investigated until no MEC or MD are identified.

Section 17A.3.7:

ATI/HGL anticipates that a maximum of 50 targets will be reacquired and investigated at the SFDA. The previous DGM data for the Abandoned Burning Area indicates the anomaly density is likely very low (less than 25 anomalies per acre), and ATI/HGL anticipates investigating a maximum of 25 anomalies. If the anomaly density is significantly higher, ATI/HGL will design an acceptable anomaly investigation strategy similar to that used for the original DGM survey and intrusive investigation of the SFDA together with the USACE Omaha technical representative.



PROPOSED CHANGE:

ATI/HGL propose to collect two additional transects at approximately 50 ft spacing on the south and eastern sides of the SFDA prior to investigating anomalies (reference Attachment 1 to the FWV). The additional data will be compared to the spatial trend of anomalies in the high-density feature and the average density of anomalies in the additional transects will be calculated. If the additional transects have average densities that exceed the background density and/or have a localized area of higher density that correlates with the SFDA high-density feature, HGL will start to investigate anomalies until MEC or MD is identified on the outermost transect. If MEC or MD is identified, additional transect data will be collected and the process repeated on the next outermost transect. ATI/HGL will send anomaly selections for investigation to the USACE Omaha technical representative for review.

No change is proposed in the methodology to select anomalies for investigation at the ABA. Section 17A.3.7:

The previous DGM data for the ABA indicates the anomaly density is likely very low (less than 25 anomalies per acre), and ATI/HGL anticipates investigating a maximum of 25 anomalies. **If the anomaly density is significantly higher, ATI/HGL will design an acceptable anomaly investigation strategy similar to that used for the original DGM survey and intrusive investigation of the SFDA together with the USACE Omaha technical representative.**

The anomaly density at the ABA is significantly higher, and ATI/HGL propose to use the *Anomaly Verification Sampling* module with the same parameters used for the 2013 Visual Sample Plan (VSP) Density analysis (95% confidence that 95% of the locations in the selected area do not contain TOI). Based on approximately 500 anomalies, 56 require investigation.

TECHNICAL JUSTIFICATION:

The VSP analysis performed on the full coverage DGM data collected at the SFDA in 2012 indicates background areas are characterized by densities less than 200 anomalies per acre. The high-density feature is characterized by densities that exceed 450 anomalies per acre. The central portion of the east-west 2020 DGM transects shows a trend of higher density that correlates with the trend of the high-density feature in the full coverage DGM area. The average target density of the two outermost transects is approximately 560 anomalies per acre, which is more than two times the background density. Sixty-three (63) percent of the anomalies investigated in 2012 in the high-density area were related to MD. Based on the relatively high density of anomalies in the 2020 transects and the trend of the high-density feature, it is likely that MD is present on the central portion of the outermost east-west transect. Collecting additional DGM transect data is warranted prior to conducting intrusive anomaly investigations.

COST/SCHEDULE IMPACT:

DGM transect data collection at the site is very efficient based on the ability to use real-time kinematic global positioning system. The effort for vegetation clearance is minimal because the skid steer equipped with a brush cutting head is already onsite. Since all team members are already onsite and project infrastructure (e.g., IVS) is in place, the proposed changes for brush clearance, DGM, and data analysis are not expected to extend the field investigation campaign or add costs.

REASON FOR CHANGE:

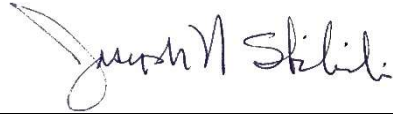
X  ADDITION

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APPLICABLE DOCUMENT:

Final Uniform Federal Policy-Quality Assurance Project Plan, RI/FS, Burning Grounds, Sanitary Landfill, and Pistol Range Areas (Remaining Property of the U.S. Government), Cornhusker Army Ammunition Plant, Grand Island, Nebraska (January 2020)

cc: Distribution



29 May 2020

APPROVED BY \_\_\_\_\_

DATE \_\_\_\_\_

HGL Project Manager

APPROVED BY \_\_\_\_\_

DATE \_\_\_\_\_





Contracting Officer's Representative



# CHAAP RI/FS


**Survey and IVS Areas**

**LEGEND**

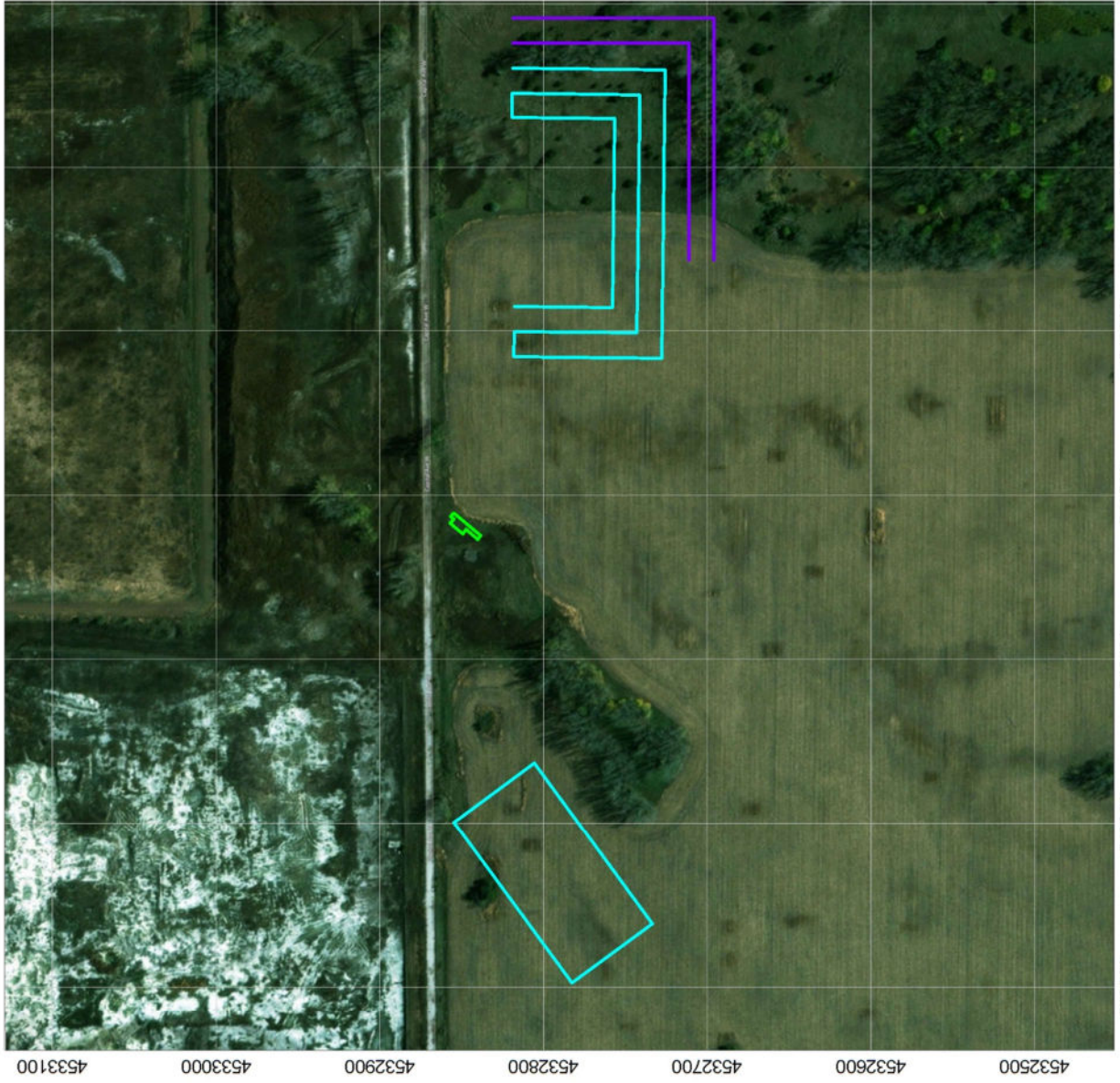
-  IVS Area
-  ABA Survey Area
-  SFDA Transects
-  SFDA Expansion Transects

Client: USACE-Omaha
Project: CHAAP
Contractor: A/T/HGL
Created by: Josh DeFrees   Verified by:
Date: 2020/05/28   File: CHAAP_IVS_Location
Page number:

Scale 1:4000




Grid North: 0°50'  
Mag North: 2°58'4"




## **Safety Inspections**


# Site Safety Inspection Log

<b>Date:</b> 05.26.2020	<b>Time:</b> 0700-1200	<b>Project location (site name, city and state):</b> CORNHUSKER AAP	<b>Project number:</b> W9128F-16-D-0014
<b>Lost time accidents (hours):</b> 0	<b>Days since last reported injury:</b> N/A – 0 Days Injury Free		<b>Last reportable injury:</b> N/A
<b>Type of Inspection:</b> <input checked="" type="checkbox"/> Daily: <input type="checkbox"/> Weekly <input type="checkbox"/> Monthly <input type="checkbox"/> Special <input type="checkbox"/> Re-inspection			
<b>I. ACTIVITY INSPECTED</b> (indicate results by an "X")	<b>SATISFACTORY</b>	<b>UNSATISFACTORY</b>	<b>NOT APPLICABLE</b>
a. Site Mobilization/Demobilization	X		
b. Surface Sweep Operations	X		
c. Subsurface Operations			X
d. Geophysical Operations	X		
e. Survey/Vegetation Removal Operations	X		
f. Heavy Equipment/Earth Moving Machinery	X		
g. Personal Protection Equipment	X		
h. Safe Work Practices	X		
i. Site Controls	X		
j. First Aid/Medical Equipment	X		
k. Fire Extinguisher/Fire Fighting Equipment	X		
l. Demolition Operations			X
m. Explosive Storage			X
n. Explosive Transportation Procedures			X
o. Emergency Procedures	X		
<b>II. OVERALL INSPECTION RESULTS</b>	<b>X</b>		
<b>III. COMMENTS:</b>			
<p>Safety brief and op brief given to new site personnel IAW CHAAP Workplan, APP/SSHP, SDS, AHAs, and SOPs. Site orientation for new personnel.</p> <p>No overnight safety concerns were reported. 8 personnel.</p> <p>Intrusive clearance ops continued on Abandoned Burning Area. A tailgate safety brief was given by the Team leader prior to operations and documented on the Tailgate Safety Meeting Log. No safety issues or concerns. End of day health and safety assessment conducted. Nothing observed or reported.</p>			
<b>IV. ACTIONS</b> (indicate results by an "X")	<b>YES</b>	<b>NO</b>	<b>COMMENTS</b>
Work stopped due to safety violations:		X	
Safety violation noted:			
Personnel involved:			
Corrective measures:			
Re-inspection required:			
Demolitions Operations Conducted:			
<b>V. SITE VISITORS (Name, organization and purpose of visit)</b>			
<b>VI. SIGNATURE.</b> I acknowledge that I have been briefed on the results of this inspection and will take corrective actions as necessary.			
<b>Site Safety &amp; Health Officer</b> (print name/signature)			
			
<b>Anthony Indelicato, UXOSO</b>			


# Site Safety Inspection Log

<b>Date:</b> 05.27.2020	<b>Time:</b> 0700-1200	<b>Project location (site name, city and state):</b> CORNHUSKER AAP	<b>Project number:</b> W9128F-16-D-0014
<b>Lost time accidents (hours):</b> 0	<b>Days since last reported injury:</b> N/A – 2 Days Injury Free		<b>Last reportable injury:</b> N/A
<b>Type of Inspection:</b> <input checked="" type="checkbox"/> Daily: <input type="checkbox"/> Weekly <input type="checkbox"/> Monthly <input type="checkbox"/> Special <input type="checkbox"/> Re-inspection			
<b>I. ACTIVITY INSPECTED</b> (indicate results by an "X")	<b>SATISFACTORY</b>	<b>UNSATISFACTORY</b>	<b>NOT APPLICABLE</b>
a. Site Mobilization/Demobilization	X		
b. Surface Sweep Operations	X		
c. Subsurface Operations			X
d. Geophysical Operations	X		
e. Survey/Vegetation Removal Operations	X		
f. Heavy Equipment/Earth Moving Machinery	X		
g. Personal Protection Equipment	X		
h. Safe Work Practices	X		
i. Site Controls	X		
j. First Aid/Medical Equipment	X		
k. Fire Extinguisher/Fire Fighting Equipment	X		
l. Demolition Operations			X
m. Explosive Storage			X
n. Explosive Transportation Procedures			X
o. Emergency Procedures	X		
<b>II. OVERALL INSPECTION RESULTS</b>	<b>X</b>		
<b>III. COMMENTS:</b> Morning safety brief given to all personnel IAW APP/SSHP. No overnight safety concerns were reported. 8 personnel. Intrusive clearance ops continued on Abandoned Burning Area. A tailgate safety brief was given by the Team leader prior to operations and documented on the Tailgate Safety Meeting Log. Safe dig techniques and PPE was emphasized. No safety issues or concerns. End of day health and safety assessment conducted. Nothing observed or reported.			
<b>IV. ACTIONS</b> (indicate results by an "X")	<b>YES</b>	<b>NO</b>	<b>COMMENTS</b>
Work stopped due to safety violations:		X	
Safety violation noted:			
Personnel involved:			
Corrective measures:			
Re-inspection required:			
Demolitions Operations Conducted:			
<b>V. SITE VISITORS (Name, organization and purpose of visit)</b>			
<b>VI. SIGNATURE.</b> I acknowledge that I have been briefed on the results of this inspection and will take corrective actions as necessary.			
<b>Site Safety &amp; Health Officer</b> (print name/signature)			
			
<b>Anthony Indelicato, UXOSO</b>			


# Site Safety Inspection Log

Date: 05.28.2020	Time: 0700-1200	Project location (site name, city and state): CORNHUSKER AAP	Project number: W9128F-16-D-0014
Lost time accidents (hours): 0	Days since last reported injury: N/A – 3 Days Injury Free	Last reportable injury: N/A	
Type of Inspection: <input checked="" type="checkbox"/> Daily: <input type="checkbox"/> Weekly <input type="checkbox"/> Monthly <input type="checkbox"/> Special <input type="checkbox"/> Re-inspection			
<b>I. ACTIVITY INSPECTED</b> (indicate results by an "X")		<b>SATISFACTORY</b>	<b>UNSATISFACTORY</b>
		<b>NOT APPLICABLE</b>	
a. Site Mobilization/Demobilization			X
b. Surface Sweep Operations	X		
c. Subsurface Operations	X		
d. Geophysical Operations	X		
e. Survey/Vegetation Removal Operations	X		
f. Heavy Equipment/Earth Moving Machinery	X		
g. Personal Protection Equipment	X		
h. Safe Work Practices	X		
i. Site Controls	X		
j. First Aid/Medical Equipment	X		
k. Fire Extinguisher/Fire Fighting Equipment	X		
l. Demolition Operations			X
m. Explosive Storage			X
n. Explosive Transportation Procedures			X
o. Emergency Procedures	X		
<b>II. OVERALL INSPECTION RESULTS</b>		X	
<b>III. COMMENTS:</b>			
<p>Morning safety brief given to all personnel IAW APP/SSHP. No overnight safety concerns were reported. 8 personnel. Intrusive clearance ops continued on Abandoned Burning Area. A tailgate safety brief was given by the Team leader prior to operations and documented on the Tailgate Safety Meeting Log. Safe dig techniques and PPE was emphasized. No safety issues or concerns. End of day health and safety assessment conducted. Nothing observed or reported.</p>			
<b>IV. ACTIONS</b> (indicate results by an "X")		<b>YES</b>	<b>NO</b>
			<b>COMMENTS</b>
Work stopped due to safety violations:		X	
Safety violation noted:			
Personnel involved:			
Corrective measures:			
Re-inspection required:			
Demolitions Operations Conducted:			
<b>V. SITE VISITORS (Name, organization and purpose of visit)</b>			
<b>VI. SIGNATURE.</b> I acknowledge that I have been briefed on the results of this inspection and will take corrective actions as necessary.			
Site Safety & Health Officer (print name/signature)			
Anthony Indelicato, UXOSO			


# Site Safety Inspection Log

<b>Date:</b> 05.29.2020	<b>Time:</b> 0700-1200	<b>Project location (site name, city and state):</b> CORNHUSKER AAP	<b>Project number:</b> W9128F-16-D-0014
<b>Lost time accidents (hours):</b> 0	<b>Days since last reported injury:</b> N/A – 4 Days Injury Free		<b>Last reportable injury:</b> N/A
<b>Type of Inspection:</b> <input checked="" type="checkbox"/> Daily: <input type="checkbox"/> Weekly <input type="checkbox"/> Monthly <input type="checkbox"/> Special <input type="checkbox"/> Re-inspection			
<b>I. ACTIVITY INSPECTED</b> (indicate results by an "X")	<b>SATISFACTORY</b>	<b>UNSATISFACTORY</b>	<b>NOT APPLICABLE</b>
a. Site Mobilization/Demobilization			<b>X</b>
b. Surface Sweep Operations	<b>X</b>		
c. Subsurface Operations	<b>X</b>		
d. Geophysical Operations	<b>X</b>		
e. Survey/Vegetation Removal Operations	<b>X</b>		
f. Heavy Equipment/Earth Moving Machinery			<b>X</b>
g. Personal Protection Equipment	<b>X</b>		
h. Safe Work Practices	<b>X</b>		
i. Site Controls	<b>X</b>		
j. First Aid/Medical Equipment	<b>X</b>		
k. Fire Extinguisher/Fire Fighting Equipment	<b>X</b>		
l. Demolition Operations			<b>X</b>
m. Explosive Storage			<b>X</b>
n. Explosive Transportation Procedures			<b>X</b>
o. Emergency Procedures	<b>X</b>		
<b>II. OVERALL INSPECTION RESULTS</b>	<b>X</b>		
<b>III. COMMENTS:</b>			
<p>Morning safety brief given to all personnel IAW APP/SSHP. No overnight safety concerns were reported. 8 personnel. Vehicle inspections and Heavy Equipment inspections completed and documented on the HGL inspection forms.</p> <p>Intrusive clearance ops continued on Abandoned Burning Area. A tailgate safety brief was given by the Team leader prior to operations and documented on the Tailgate Safety Meeting Log. Safe dig techniques and PPE was emphasized. No safety issues or concerns. End of day health and safety assessment conducted. Nothing observed or reported.</p>			
<b>IV. ACTIONS</b> (indicate results by an "X")	<b>YES</b>	<b>NO</b>	<b>COMMENTS</b>
Work stopped due to safety violations:		<b>X</b>	
Safety violation noted:			
Personnel involved:			
Corrective measures:			
Re-inspection required:			
Demolitions Operations Conducted:			
<b>V. SITE VISITORS (Name, organization and purpose of visit)</b>			
<b>VI. SIGNATURE.</b> I acknowledge that I have been briefed on the results of this inspection and will take corrective actions as necessary.			
<b>Site Safety &amp; Health Officer</b> (print name/signature)			
			
<b>Anthony Indelicato, UXOSO</b>			

# Site Safety Inspection Log

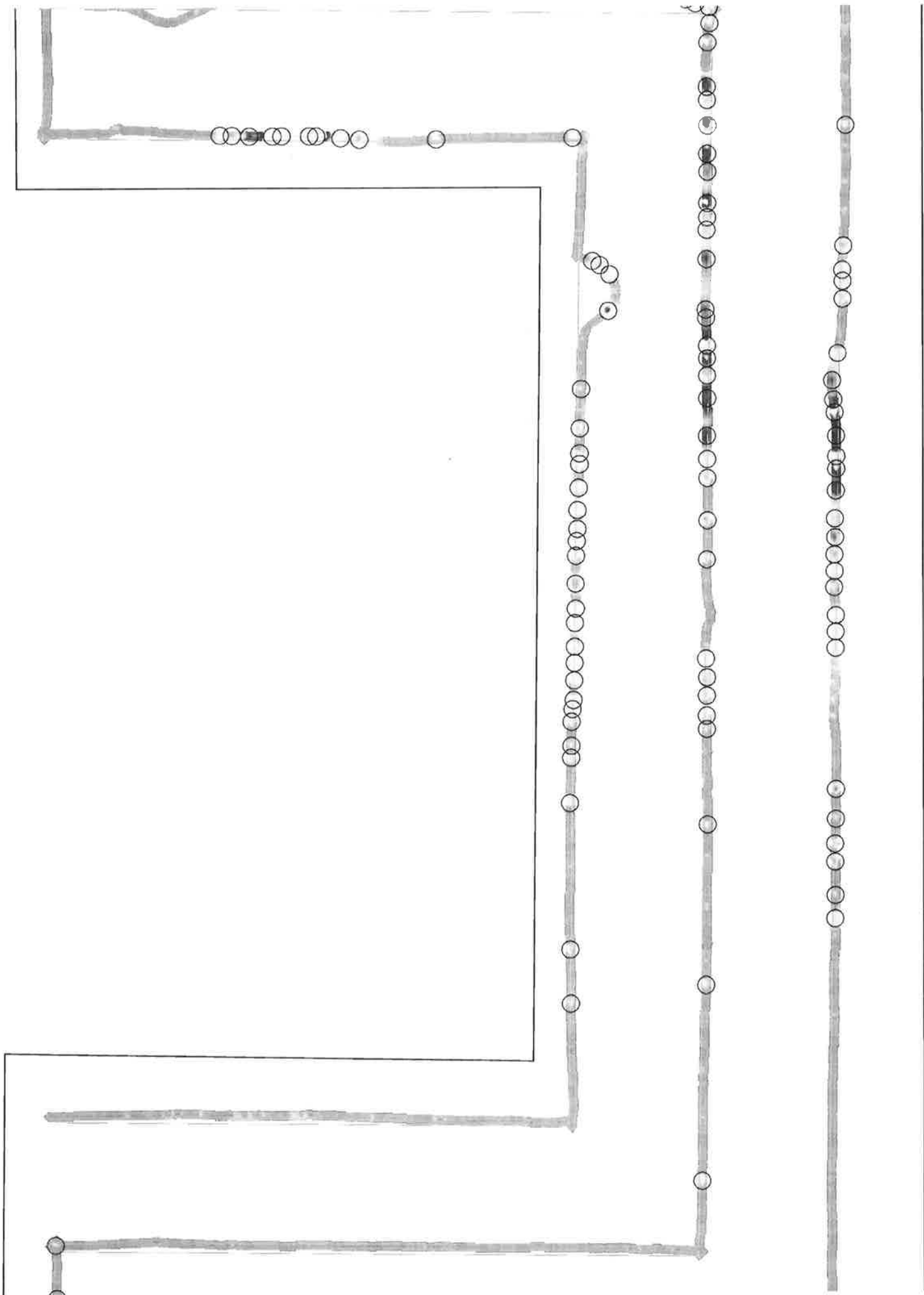
<b>Date:</b> 06.01.2020	<b>Time:</b> 0700-1200	<b>Project location (site name, city and state):</b> CORNHUSKER AAP	<b>Project number:</b> W9128F-16-D-0014
<b>Lost time accidents (hours):</b> 0	<b>Days since last reported injury:</b> N/A – 5 Days Injury Free		<b>Last reportable injury:</b> N/A
<b>Type of Inspection:</b> <input checked="" type="checkbox"/> Daily: <input type="checkbox"/> Weekly <input type="checkbox"/> Monthly <input type="checkbox"/> Special <input type="checkbox"/> Re-inspection			
<b>I. ACTIVITY INSPECTED</b> (indicate results by an "X")	<b>SATISFACTORY</b>	<b>UNSATISFACTORY</b>	<b>NOT APPLICABLE</b>
a. Site Mobilization/Demobilization			X
b. Surface Sweep Operations			X
c. Subsurface Operations	X		
d. Geophysical Operations			X
e. Survey/Vegetation Removal Operations			X
f. Heavy Equipment/Earth Moving Machinery	X		
g. Personal Protection Equipment	X		
h. Safe Work Practices	X		
i. Site Controls	X		
j. First Aid/Medical Equipment	X		
k. Fire Extinguisher/Fire Fighting Equipment	X		
l. Demolition Operations			X
m. Explosive Storage			X
n. Explosive Transportation Procedures			X
o. Emergency Procedures	X		
<b>II. OVERALL INSPECTION RESULTS</b>	<b>X</b>		
<b>III. COMMENTS:</b> Morning safety brief given to all personnel IAW APP/SSHP. No overnight safety concerns were reported. 8 personnel. Intrusive clearance ops continued on Abandoned Burning Area. A tailgate safety brief was given by the Team leader prior to operations and documented on the Tailgate Safety Meeting Log. Safe dig techniques and PPE was emphasized. No safety issues or concerns. End of day health and safety assessment conducted. Nothing observed or reported.			
<b>IV. ACTIONS</b> (indicate results by an "X")	<b>YES</b>	<b>NO</b>	<b>COMMENTS</b>
Work stopped due to safety violations:		X	
Safety violation noted:			
Personnel involved:			
Corrective measures:			
Re-inspection required:			
Demolitions Operations Conducted:			
<b>V. SITE VISITORS (Name, organization and purpose of visit)</b>			
<b>VI. SIGNATURE.</b> I acknowledge that I have been briefed on the results of this inspection and will take corrective actions as necessary.			
<b>Site Safety &amp; Health Officer</b> (print name/signature)			
			
<b>Anthony Indelicato, UXOSO</b>			

# Site Safety Inspection Log

<b>Date:</b> 06.02.2020	<b>Time:</b> 0700-1200	<b>Project location (site name, city and state):</b> CORNHUSKER AAP	<b>Project number:</b> W9128F-16-D-0014
<b>Lost time accidents (hours):</b> 0	<b>Days since last reported injury:</b> N/A – 0 Days Injury Free		<b>Last reportable injury:</b> N/A
<b>Type of Inspection:</b> <input checked="" type="checkbox"/> Daily: <input type="checkbox"/> Weekly <input type="checkbox"/> Monthly <input type="checkbox"/> Special <input type="checkbox"/> Re-inspection			
<b>I. ACTIVITY INSPECTED</b> (indicate results by an "X")	<b>SATISFACTORY</b>	<b>UNSATISFACTORY</b>	<b>NOT APPLICABLE</b>
a. Site Mobilization/Demobilization			X
b. Surface Sweep Operations	X		
c. Subsurface Operations	X		
d. Geophysical Operations	X		
e. Survey/Vegetation Removal Operations	X		
f. Heavy Equipment/Earth Moving Machinery			X
g. Personal Protection Equipment	X		
h. Safe Work Practices	X		
i. Site Controls	X		
j. First Aid/Medical Equipment	X		
k. Fire Extinguisher/Fire Fighting Equipment	X		
l. Demolition Operations			X
m. Explosive Storage			X
n. Explosive Transportation Procedures			X
o. Emergency Procedures	X		
<b>II. OVERALL INSPECTION RESULTS</b>	<b>X</b>		
<b>III. COMMENTS:</b>			
<p>Morning safety brief given to all personnel IAW APP/SSHP. No overnight safety concerns were reported. 8 personnel. Intrusive clearance ops continued on Abandoned Burning Area and South Fuze Destruct Area. A tailgate safety brief was given by the Team leader prior to operations and documented on the Tailgate Safety Meeting Log. Safe dig techniques and PPE was emphasized. No safety issues or concerns. End of day health and safety assessment conducted. Nothing observed or reported.</p>			
<b>IV. ACTIONS</b> (indicate results by an "X")	<b>YES</b>	<b>NO</b>	<b>COMMENTS</b>
Work stopped due to safety violations:		X	
Safety violation noted:		X	
Personnel involved:			
Corrective measures:			
Re-inspection required:			
Demolitions Operations Conducted:			
<b>V. SITE VISITORS (Name, organization and purpose of visit)</b>			
<b>VI. SIGNATURE.</b> I acknowledge that I have been briefed on the results of this inspection and will take corrective actions as necessary.			
Site Safety & Health Officer (print name/signature)			
			
<b>Anthony Indelicato, UXOSO</b>			



## **Field Forms and Records**



DIGSHEET--Cornhusker Army Ammunition Plant

Site: ~~Blank~~ SEDA Rd 4

Issue Date: 5/27/2020 9:52:22 PM

Target ID	Ch2 mV	Search Radius (m)	Pre-Dig mV	Date (m/d)	Off. (In.)	Dir. (N, NE, etc.)	Depth (In)	Type (MD, MC, UXO, DMM, RRD, SAA, CD, Seed, NC, Other)	Length (in.)	Wgt. (lbs)	Orien. (H, I, V)	Description (include nomenclature for munitions items)	Qty.	Post-Dig mV	UXOQS Accept (Y/N)
" 1	1320	1m	1470	26/03	14"	NW	18"	OD	10"	4.0	H	TRASH PIT, SCRAP METAL	15	1210mV	AP
" 3	1109	1m	2210	26/03	0"	N/A	4"	OD	24"	35.0	H	TRASH PIT, SCRAP METAL	70	1750	AP
" 4	535	1m	715	26/03	0"	N/A	00	OD	24"	25	H	TRASH PIT, SCRAP METAL, ALUMINIUM	18	560	AP
" 11	124	1m	204	26/03	0"	N/A	00	OD	4"	5.0	H	SCRAP METAL, BRACKETS, NAILS	8	26mV	AP
" 16	113	1m	207	26/03	12"	SW	5"	OD	24"	2.0	H	PIPE, CAN TOP, NAILS	4	31mV	AP
" 24	29	1m	29	26/03	4"	S	4"	OD/MD	6"	.3	H	NAIL, SCRAP METAL, WIRE, FUSE PIECE	5	8mV	AP
" 76	9.1	1m	11	26/03	5"	E	5"	OD/MD	2"	.2	H	SCRAP METAL, FUSE PIECES, UNWRENCHED THREAD	8	6.8mV	AP
" 82	7.4	1m	9	26/03	12"	S	5"	OD/	4"	.2	H	NAILS	2	3mV	AP
" 114	3.5	1m	75	26/03	0"	E	4"	OD	5"	1.0	H	PIPE, NAIL	2	4mV	AP
" 228	9.5	1m	12	26/03	12"	NE	3"	OD	4"	.2	H	BOLT, SCRAP METAL	3	2mV	AP
" 229	74.9	1m	75	26/03	5"	E	4"	OD	4"	.3	H	BOLT, SCRAP METAL, NAILS	6	12mV	AP
" 231	30.5	1m	31	26/03	3"	N	5"	OD	4"	.2	H	WIRE, BOLT, NAILS	5	7mV	AP
" 233	15.7	1m	18	26/03	4"	E	4"	OD	4"	.2	H	BOLT, NAILS, UNWRENCHED NUMEROUS ANOMALYS	5	10mV	AP
" 234	611	1m	783	26/03	10"	S	15"	OD	36"	25.0	H	CAR PIECES, WIRE, SCRAP METAL, TRASH PIT	4	172mV	AP
"															
"															
"															
"															
"															

Date Completed: \_\_\_\_\_ Sensor ID: \_\_\_\_\_ Reviewed By: \_\_\_\_\_ Date: \_\_\_\_\_

SAA: Small Arms Ammunition; Other: grid corners/boundary nails, hot rocks/soil, or shared huc; Target Types: SPA: single point anomaly, SPG: Single point data gap, PGPE: Data Gap Polygon Boundary Point, PSP: Saturated Polygon boundary  
Geo Questions? Call Josh @ 720-491-8149 or Leighton @ 757-784-7972

DIGSHEET--Cornhusker Army Ammunition Plant

Site: Blank *SFLA Rd 3a*

Target ID	Ch2 mV	Search Radius (m)	Pre-Dig mV	Date (m/d)	Off. (in.)	Dir. (N, NE, etc.)	Depth (in)	Type (MD, MC, UXO, DMM, RRD, SAA, CD, Seed, NC, Other)	Length h (in.)	Wgt. (lbs)	Orien. (H, I, V)	Description (include nomenclature for munitions items)	Qty.	Post-Dig mV	UXOQCS Accept (Y/N)
" 92	5.4	1m	5	06/02	0"	N/A	5"	OD	2"	.1	H	SCRAP METAL	1	0mV	
" 109	3.9	1m	5	06/02	0"	N/A	7"	OD	2"	.2	H	SCRAP METAL, 2mV OVER FLAG, AREA DIRTY	2	2mV	
" 133	7.5	1m	5	06/02	2"	S	10"	OD	10"	.3	H	SCRAP METAL, WIRE	2	0mV	
" 206	3.5	1m	5	06/02	0"	N/A	6"	OD	4"	.1	H	NAIL	1	0mV	
" 242	6.	1m	14	06/02	4"	SE	5"	OD	4"	.2	H	SCRAP METAL	1	0mV	
" 243	41	1m	5	06/02	0"	N/A	4"	OD	2"	.2	H	SCRAP METAL, EYELET	3	0mV	
" 244	9.5	1m	11	06/02	4"	W	6"	OD	4"	.4	H	SCRAP METAL, NAILS, INFLUENCED TRASH PIT	4	4mV	
" 245	76.9	1m	140	06/02	0"	N/A	1"	OD	8ft	2lb	H	METAL ROD, NAILS, EDGE OF LG TRASH PIT	8	30mV	
" 502	8	1m	27	06/02	0"	N/A	4"	MD	3"	.5	H	FUZE PIECE, M404	1	0mV	
" 203	5.6	1m	8	06/02	24"	E	4"	OD	4"	.2	H	SCRAP METAL, NAILS, GEAR	4	2mV	
" 204	27	1m	3	06/02	12"	N	6"	OD	3"	.2	H	SCRAP METAL	4	1mV	
" 205	27	1m	5	06/02	6"	SW	2"	OD	4"	.2	H	SCRAP METAL	4	0mV	
" 210	440	1m	850	06/02	0"	N/A	1"	OD	12"	.5	H	LARGE CAN LID	1	1.5mV	
" 241	5.2	1m	8	06/02	0"	N/A	2"	OD	4"	.1	H	NAIL	1	2mV	
"															
"															
"															
"															
"															

Date Completed: \_\_\_\_\_ Sensor ID: \_\_\_\_\_ Reviewed By: \_\_\_\_\_ Date: \_\_\_\_\_

SAA - Small Arms Ammunition; Other (end corner/boundary nails, hot rocks/soil, or shared hits); Target Types: SPA - single point anomaly, SPG - single point data gap, PGPC - Data Gap Polygon Boundary Point, PSPC - Saturated Polygon boundary  
 Geo Questions? Call Josh @ 720-491-8149 or Leighton @ 757-784-7972

\* wait til last

DIGSHEET—Cornhusker Army Ammunition Plant

Site: Blank SFOA round 2

Issue Date: 5/27/2020 9:52:21 PM

Page: 1 of 2

Target ID	Ch2 mV	Search Radius (m)	Pre-Dig mV	Date (m/d)	Off. (in.)	Dir. (N, NE, etc.)	Depth (in)	Type (MO, MC, UXO, DMM, RRD, SAA, CD, Seed, NC, Other)	Length (in.)	Wgt. (lbs)	Orien. (H, I, V)	Description (include nomenclature for munitions items)	Qty.	Post-Dig mV	UXOQCS Accept (Y/N)
* 29	21.2	1m	45	06/07	0"	N/A	4"	OD	3"	1.2	H	METAL SPACER, SCRAP METAL, NAILS	6	2mV	
* 37	21.0	1m	200	06/07	9"	S	1"	OD	6"	3.0	H	ANGLE IRON	1	2mV	
* 52	13.9	1m	40	06/07	0"	N/A	10"	OD	6"	.3	H	NAILS PIT	8	10mV	
83	7.0	1m	11	06/02	3"	SE	4"	MD	2"	.2	H	ROCKET PIECES 2.36"	2	.5mV	
110	3.8	1m	57	06/02	3"	E	1"	MD	3"	.5	H	FUZE PIECES, MUSH	5	0mV	
221	2.9	1m	4	06/02	4"	SW	3"	OD	1"	.1	H	SCRAP METAL, BOLT	2	0mV	
375	2.9	1m	1	06/02	0"	N/A		NC				NO CONTACT - DEADFALL	0	1mV	
376	3.4	1m	0	06/02	0"	N/A		NC				NO CONTACT - DEADFALL	0	0mV	
378	3.7	1m	0	06/02				NC				NO CONTACT - DEADFALL	0	0mV	
54	13.4	1m		06/02								IN STANDING WATER 8"			
121	3.3	1m	13	06/02	3"	E	3"	MD	2"	.2	H	FIRE PIECES, MUSH	2	0mV	
130	2.7	1m		06/02								IN STANDING WATER 6"			
131	2.7	1m	7	06/02	3"	NW	3"	MD	2"	.2	H	FUZE PIECE	1	0mV	
444		1m	0	06/02				NC				NO CONTACT - DEADFALL	0	0mV	

Date Completed: \_\_\_\_\_ Sensor ID: \_\_\_\_\_ Reviewed By: \_\_\_\_\_ Date: \_\_\_\_\_

SAA: Small Arms Ammunition; Other: gnd corner/boundary nail, hot rock/soil, or shared hit; Target Types: SPA: single point anomaly, SPG: Single point data gap, PGPT: Data Gap Polygon Boundary Point, PPT: Securitized Polygon boundary  
 Geo Questions? Call Josh @ 720-491-8149 or Leighton @ 757-784-7972

Site: Blank SFOA Batch 1

G11213:00

DIGSHEET--Cornhusker Army Ammunition Plant

Issue Date: 6/27/2020 9:52:22 PM

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Target ID	Ch2 mV	Search Radius (m)	Pre-Dig mV	Date (m/d)	Off. (in.)	Dir. (N, NE, etc.)	Depth (in)	Type (MO, MC, UXO, DMM, RRD, SAA, CD, Seed, NC, Other)	Length (in.)	Wgt. (lbs)	Orien. (H, I, V)	Description (Include nomenclature for munitions items)	Qty.	Post-Dig mV	UXOQCS Accept (Y/N)
" 36	23.2	1m	32	06/01	12"	SW	2"	00	8"	.75	H	LARGE SPIKE NAILS, SCRAP METAL	4	0mV	<del>Y</del>
" 40	21.0	1m	34	06/01	6"	N	3"	MO	1"	.3	H	FUZE ROCKET PIECES 2.36" M404	5	0mV	<del>Y</del>
" 43	19.4	1m	30	06/02	0"	N/A	2"	00	8"	1.0	H	SCRAP METAL, NAIL	2	2mV	
" 67	9.6	1m	16	06/01	6"	E	18"	00	6"	1.0	H	PIPE, WIRE, SMALL BITS OF WIRE, 5.5mV	10	5.5mV	<del>Y</del>
" 71	8.6	1m	27	06/01	5"	N	5"	MO	3"	1.0	H	ROCKET PIECES, 2.36" FUZE PIECE, M404	3	5mV	<del>Y</del>
" 79	7.5	1m	19	06/02	4"	N	4"	00/MO	4"	.2	H	NAILS, FUZE PIECE M404	3	8mV	
" 81	7.5	1m	30	06/01	0"	N/A	3"	SEED	4"	.75	H	SEED, 30x8549, SMALL ISO	1	0mV	
" 86	6.2	1m	7	06/02	24"	NW	6"	00	4"	.2	H	SQUARE BOLT	1	0mV	
" 106	4.2	1m	85	06/01	0"	N/A	7"	00	4"	.1	H	NAIL	1	2.7mV	<del>Y</del>
" 114	3.4	1m	6	06/01	0"	N/A	4"	00	4"	.1	H	NAIL, SCRAP METAL	3	1.5	
" 220	6.2	1m	20	06/01	0"	N/A	4"	00	6"	.1	H	NAILS	2	2mV	
" 222	14.6	1m	20	06/01	9"	S	6"	00/MO	2"	.3	H	SCRAP METAL, FUZE PIECE	3	1mV	
" 235	5.1	1m		06/02								IN STANDING WATER 2"			
" 236	9.7	1m	53	06/02	12"	E	18"	00	N/A	N/A	H	HIT GROUND WATER, EVIDENCE OF CONCRETE SLAB	N/A	S3	
" 237	6.3	1m	11	06/02	1"	S	6"	00	3"	.1	H	BARB WIRE	2	1mV	
" 238	12.0	1m	26	06/02	4"	W	3"	00	18"	.2	H	SCRAP METAL BITS, HIT GROUND WATER	10	17	
" 239	12.1	1m	2.8	06/02	5"	E	4"	00	4"	.2	V	BOLT & WASHER	2	0mV	
" 377	27.2	1m	72	06/01	12"	S	2"	00	6"	.5	H	TRACTOR PIN	1	0mV	<del>Y</del>

6 ?  
depth  
length  
switched?

Date Completed: \_\_\_\_\_ Sensor ID: \_\_\_\_\_ Reviewed By: \_\_\_\_\_ Date: \_\_\_\_\_

SAA- Small Arms Ammunition; Other: grid corner/boundary nail, hit: rock, soil, or shared hit; Target Type: SPA: single point anomaly, SPO: single point data gap, PGB: Data Gap Polygon Boundary Point, PBP: Situated Polygon boundary  
Geo Questions? Call Josh @ 720-491-8149 or Leighton @ 757-784-7972

irefox

about:blank

below  
2.7 mV  
ch2  
Page 1 of 3

DIGSHEET---Cornhusker Army Ammunition Plant

Site: Blank ABA

Issue Date: 5/27/2020 9:52:21 PM

Target ID	Ch2 mV	Search Radius (m)	Pre-Dig mV	Date (m/d)	Off. (in.)	Dir. (N, NE, etc.)	Depth (in)	Type (MD, MC, UXO, DMM, RRD, SAA, CO, Seed, NC, Other)	Length h (in.)	Wgt. (lbs)	Orien. (H, I, V)	Description (include nomenclature for munitions items)	Qty.	Post-Dig mV	UXOQCS Accept (Y/N)
"403	3.3	1	7.1	5/27	0	NA	3"	OD	3"	.1	H	SCRAP METAL	1	0mV	AP
"296	5.1	1	8.2	5/27	0	NA	4"	OD	3"	.1	H	NAIL	2	1mV	AP
"337	6.6	1	7.3	5/27	1"	N	6"	OD	3"	.5	H	SCRAP METAL, CHAIN PIECE	2	0mV	AP
"320	5.0	1	6.7	5/27	0"	NA	4"	OD	2"	.1	H	SLAG	1	0mV	AP
"376	4.8	1	8	5/27	0"	NA	1"	OD	2"	.1	H	SLAG	1	0mV	AP
"432	2.9	1	5.3	5/27	0"	NA	5"	OD	3"	.1	H	NAIL	1	1mV	AP
"450	2.7	1	4.3	5/27	0"	NA	2"	MD	2"	.2	H	FUZE PIECE M404	1	0mV	AP
"179	9.0	1	10.4	5/27	3"	NW	7"	OD	3"	.1	V	NAIL, RUST FLAKES	1	3mV	AP
"60	20.3	1	21.2	5/27	18"	N	18"	OD	3"	.2	H	NAILS, SCRAP METAL, SMALL BITS OF SLAG	5	10mV	AP
"427	3.0	1	5.4	5/27	3"	E	4"	OD	2"	.5	H	SLAG	2	0mV	AP
"64	19.4	1	26.4	5/27	1"	N	2"	OD	4"	.5	V	SLAG, HINGE	2	0mV	AP
"82	17.0	1	16	5/27	4"	N	4"	OD	3"	.5	H	NAILS, SMALL BITS OF SLAG	5	10mV	AP
"399	3.4	1	4	5/27	0"	NA	2"	OD	2"	.5	H	SMALL WHEEL	1	1mV	AP
"413	7.9	1	7.4	5/27	4"	S	8"	OD	2"	.2	H	SLAG, NAILS, RUST FLAKES	4	4mV	AP
"289	5.6	1	7.2	5/27	3"	N	2"	OD	3"	.2	H	ALUMINUM SCRAP, SLAG	1	0mV	AP
"317	5.0	1	8	5/27	0"	NA	6"	OD	3"	.2	H	SLAG	1	0mV	AP
"270	5.9	1	12.1	5/27	0"	NA	4"	OD	2"	.1	H	WASHER, SCRAP METAL	2	0mV	AP
"178	7.1	1	9.2	5/27	2"	N	3"	OD	3"	.1	H	NAIL, SCRAP METAL	2	0mV	AP
"176	9.2	1													

27 needed

Date Completed: \_\_\_\_\_ Sensor ID: \_\_\_\_\_ Reviewed By: \_\_\_\_\_ Date: \_\_\_\_\_

SAA: Small Arms Ammunition; Other: end cone/secondary nails, hot ends/soil, or shored pits. Target Types: SPA: single point anomaly, SPO: single point data gap, FCP: Data Gap Location Boundary Point, PS: Surface of Polygon boundary  
Geo Questions? Call Josh @ 720-491-8149 or Leighton @ 757-784-7972

28-May-20, 04:55 AM  
28-May-20, 04:55 AM

DIGSHEET—Cornhusker Army Ammunition Plant

Site: ABA

Issue Date: 5/31/2020 12:26:23 PM

Page 2 of 3

Target ID	Ch2 mV	Search Radius (m)	Pre-Dig mV	Date (m/d)	Off. (in.)	Dir. (N, NE, etc.)	Depth (in)	Type (MO, MC, UXO, DMM, RRD, SAA, CD, Seed, NC, Other)	Length (in.)	Wgt. (lbs)	Orien. (H, V)	Description (Include nomenclature for munitions items)	Qty.	Post-Dig mV	UXO/QCS Accept (Y/N)
ABA_171	9.5	1.0	18	05/10/20	1"	N	6"	OD	6"	.2	V	NAIL, SCRAP METAL	2	0MV	AP
ABA_175	9.3	1.0	12	05/10/20	1"	W	4"	OD	6"	.1	H	NAIL, SLAG	2	0MV	AP
ABA_176	9.2	1.0	12	05/10/20	1"	NE	3"	OD	2"	.2	H	NUT/BOLT, NAIL	2	0MV	AP
ABA_187	8.6	1.0	9	05/10/20	3"	SW	3"	OD	2"	.1	H	SCRAP METAL	1	0MV	AP
ABA_198	8.0	1.0	15	05/10/20	1"	SE	1"	OD	6"	.2	H	NAIL, SCRAP METAL	2	0MV	
ABA_201	7.9	1.0	3	05/10/20	3"	W	2"	OD	2"	.3	H	BOLT, SCRAP METAL	2	0MV	
ABA_204	7.9	1.0	13	05/10/20	2"	SE	2"	OD	4"	.1	H	NAILS	2	0MV	
ABA_234	7.9	1.0	19	05/10/20	2"	NW	4"	OD	3"	.2	H	NAIL, METAL COIL	2	0MV	
ABA_244	9.9	1.0	15	05/10/20	0"	N/A	4"	OD	6"	.1	V	NAILS	2	0MV	
ABA_271	5.9	1.0	12	05/10/20	6"	E	5"	OD	4"	.3	H	BOLT, METAL SCRAP	2	0MV	AP
ABA_276	5.8	1.0	7.7	05/10/20	0"	N/A	4"	MD	2"	.5	H	FUZE PIECES, M404	3	0MV	AP
ABA_282	5.7	1.0	12	05/10/20	2"	E	3"	MD	2"	.1	H	FUZE PIECE	1	0MV	AP
ABA_287	5.6	1.0	7	05/10/20	1"	N	2"	OD	2"	.1	H	SCRAP METAL	1	0MV	AP
ABA_329	4.6	1.0	13	05/10/20	6"	NE	4"	OD/MD	6"	.1	H	NAIL, SCRAP METAL, BOLT HEAD, FUZE PIECE	5	0MV	
ABA_342	4.4	1.0	10	05/10/20	8"	NE	8"	OD	6"	.2	H	NAIL	1	0MV	AP
ABA_354	4.0	1.0	12	05/10/20	6"	N	4"	OD/MD	4"	.1	H	NAILS, FUZE PIECE	2	0MV	
ABA_361	3.9	1.0	6	05/10/20	1"	W	5"	MD	2"	.2	H	FUZE PIECE	1	1MV	AP
ABA_362	3.9	1.0	12	05/10/20	0"	N/A	2"	MD	2"	.2	H	FUZE PIECE, NAIL	2	0MV	AP
ABA_374	6.2	1.0	7	05/10/20	10"	NE	3"	OD	3"	.2	H	NAIL, SLAG	2	0MV	

Date Completed: \_\_\_\_\_ Sensor ID: \_\_\_\_\_ Reviewed By: \_\_\_\_\_ Date: \_\_\_\_\_

SAA - Small Arms Ammunition; Other: grid corner/boundary nails, hot rocks/soil, or shared hits; Target Types: SPA: single point anomaly, SPG: Single point data gap, PGPC: Data Cap Polygon Boundary Point, PSP: Saturated Polygon boundary

Geo Questions? Call Josh @ 720-491-8149 or Leighton @ 757-784-7972



DIGSHEET—Cornhusker Army Ammunition Plant

Site: ABA

Issue Date: 5/31/2020 12:26:23 PM

Page 1 of 3

Target ID	Ch2 mV	Search Radius (m)	Pre-Dig mV	Date (m/d)	Off. (In.)	Dir. (N, NE, etc.)	Depth (In)	Type (MD, MC, UXO, DMM, RRD, SAA, CD, Seed, NC, Other)	Length (In.)	Wgt. (lbs)	Orien. (H, I, V)	Description (Include nomenclature for munitions items)	Qty.	Post-Dig mV	UXO/QCS Accept (Y/N)
ABA_010	80.3	1.0													
ABA_013	56.7	1.0													
ABA_015	51.5	1.0	S7	06/01											
ABA_020	39.3	1.0													
ABA_024	36.4	1.0	S0	06/01											
ABA_040	25.7	1.0	32	06/01	0°	NA	4" OD	6"	.1	H	NAILS, WASHER, UNIDENTIFIED SCRAP METAL, AND WOOD	3	2mV		
ABA_044	23.5	1.0	34	06/01	4°	NW	4" MD/OD	3"	.3	H	FUZE PIECES/MUO4, BOLT	3			
ABA_051	22.2	1.0	27	06/01	1°	N	3" OD	3"	.2	H	METAL RATE	1	0mV	AP	
ABA_074	17.8	1.0	27	06/01	4°	E	3" OD	4"	.2	H	NAIL	1	0mV	AP	
ABA_080	20.8	1.0	40	06/01	12°	W	1" OD	6"	.1	H	NAILS	5	0mV	AP	
ABA_083	16.9	1.0	33	06/01	5°	SW	4" OD/MD	6"	.2	H	NAIL, HEAT <sup>SLUG ONE</sup> <del>PIPE</del> INFLUENCED ADJACENT ANOMALY TO NORTH	2	3mV	AP	
ABA_102	14.4	1.0	15	06/01	3°	E	4" MD	2"	.2	H	FUZE PIECES, INFLUENCED ADJACENT ANOMALY	2	6mV		
ABA_110	13.8	1.0	22	06/01	2°	SW	5" MD/OD	2"	.2	H	FUZE PIECE, BOLT, SCRAP METAL	3	0mV	AP	
7 - ABA_116	13.0	1.0	27	06/01	0°	NA	3" OD	6"	.2	H	NAIL, SCRAP METAL	3	2mV		
ABA_133	12.0	1.0	17	06/01	3°	SW	2" OD	5"	.2	H	NAILS, SLAG	2	0mV		
ABA_159	10.1	1.0	15	06/01	0°	NA	2" OD	6"	.2	H	NAILS	2	0mV	AP	
ABA_163	9.9	1.0	15	06/01	0°	NA	2" OD	3"	.3	H	SQUARE BOLT, SLAG	2	0mV	AP	
ABA_165	9.8	1.0	12	06/01											
ABA_169	9.6	1.0	27	06/01	0°	NA	4" OD	6"	.2	V	NAIL	1	0mV	AP	

Date Completed: \_\_\_\_\_

Sensor ID: \_\_\_\_\_

Reviewed By: \_\_\_\_\_

Date: \_\_\_\_\_

SAA: Small Arms Ammunition, Other: grid corner/boundary nails, hot rods/pool, or shared hits; Target Types: SPA: single point anomaly, SPG: single point data gap, PGPT: Data Gap Polygon Boundary Point, PSP: Saturated Polygon boundary

Geo Questions? Call Josh @ 720-491-8149 or Leighton @ 757-784-7972

DIGSHEET--Cornhusker Army Ammunition Plant

Site: ABA

Issue Date: 5/31/2020 12:26:23 PM

Page 3 of 3

Target ID	Ch2 mV	Search Radius (m)	Pre-Dig mV	Date (m/d)	Off. (In.)	Dir. (N, NE, etc.)	Depth (In)	Type (MID, MC, UXO, DMM, RRD, SAA, CD, Seed, NC, Other)	Length (In.)	Wgt. (lbs)	Orien. (N, L, V)	Description (Include nomenclature for munitions items)	Qty.	Post-Dig mV	UXO/CDS Accept (Y/N)
ABA_405	3.3	1.0	4	06/01	36"	N/E	2"	OD	2"	.2	H	SCRAP METAL	2	0.1mV	AP
ABA_431	2.9	1.0	3.1	06/01	4"	E	2"	MD	2"	.1	H	FUZE PIECE	1	1.5mV	AP

Date Completed: \_\_\_\_\_ Sensor ID: \_\_\_\_\_ Reviewed By: \_\_\_\_\_ Date: \_\_\_\_\_

SAAs: Small Arms Ammunition; UXOs: Unexploded Ordnance; MIDs: Metal Inert Debris; RRDs: Remnants of Rocket Motors; SAA: Small Arms Ammunition; CD: Casing Debris; NC: Non-Conductive; Other: Other; Type: Type; Length: Length; Wgt.: Weight; Orien.: Orientation; Description: Description; Qty.: Quantity; Post-Dig mV: Post-Dig mV; UXO/CDS Accept: UXO/CDS Accept  
 Note: Do not report on rocks, hot rocks/soil, or stored hits; Target Types: SPA: single point anomaly, SPG: Single point data gap, PGPT: Data Gap Polygon Boundary Point, PSP: Saturated Polygon boundary  
 Contact: 757-784-7972

DIGSHEET--Cornhusker Army Ammunition Plant

Site: ~~Blank~~ **ABA**

Issue Date: 5/27/2020 9:52:22 PM

Page 2 of 3

Target ID	Ch2 mV	Search Radius (m)	Pre-Dig mV	Date (m/d)	Off. (in.)	Dir. (N, NE, etc.)	Depth (in)	Type (MD, MC, UXO, DMM, RRD, SAA, CD, Seed, NC, Other)	Length h (in.)	Wgt. (lbs)	Orien. (H, I, V)	Description (include nomenclature for munitions items)	Qty.	Post-Dig mV	UXO/QCS Accept (Y/N)
"212	7.4	1	14	5/29	4"	SW	4"	OD	12"	2	H	SCRAP METAL	1	1MV	AP
"127	12.5	1	14	5/29	1"	N	3"	OD	2"	.5	H	SMALL WHEEL, SLAG, NAIL, 1MV OVER FLAG	3	10MV	AP
"187	2.6	1													
"373	3.8	1	10	5/29	2"	N	4"	OD	3"	.5	H	SCRAP METAL, SLAG	2	0MV	AP
"502	27	1	28	06/03	0"	N/A	25"	UTILITY	N/A	N/A	H	UTILITY PIPE, LEFT IN PLACE	1	28MV	AP
"504	10	1	14	06/03	0"	N/A	3"	OD	4"	.2	H	NAILS, SCRAP METAL	3	0MV	AP
"506	9	1	14	5/29	2"	N/A	4"	OD	2"	.2	H	SCRAP METAL, SLAG, NAILS	5	0MV	AP
"509	6.5	1	7	06/03	4"	W	3"	OD	3"	.1	H	NAILS	2	0MV	AP
"510	4.7	1	72	06/03	2"	W	4"	OD	2"	.3		SLAG	3	1MV	AP
"512	4.5	1	6	06/03	4"	NW	4"	OD	3"	.1	H	NAILS	3	1MV	AP
"513	3.8	1	15	06/03	N/A	N/A	N/A	N/A	N/A	N/A	N/A	NO CONTACT	N/A	1.5	AP
"515	2.7	1	6	06/03	6"	S	4"	OD	3"	.1	H	NAIL	1	0MV	AP
"		1													
"		1													
"		1													
"		1													
"		1													
"		1													

27 coded

Date Completed: \_\_\_\_\_ Sensor ID: \_\_\_\_\_ Reviewed By: \_\_\_\_\_ Date: \_\_\_\_\_

SAA - Small Arms Ammunition, Other: grid corner/boundary nails, hot rocks/soil, or shared hcs; Target Types: SPA: single point anomaly, SPG: Single point data gap, BSGP: Data Gap Polygon Boundary, Point, PSP: Squarated Polygon boundary

Geo Questions? Call Josh @ 720-491-8149 or Leighton @ 757-784-7972

DIGSHEET--Cornhusker Army Ammunition Plant

Site: ABA

Target ID	Ch2 mV	Search Radius (m)	Pre-Dig mV	Date (m/d)	Off. (In.)	Dir. (N, NE, etc.)	Depth (In.)	Type (MD, MC, UXO, DMM, RRD, SAA, CD, Seed, NC, Other)	Length (In.)	Wgt. (lbs)	Orien. (H, L, V)	Description (Include nomenclature for munitions items)	Qty.	Post-Dig mV	UXO/QCS Accept (Y/N)
ABA_010	80.3	1.0	127	02/01	4"	NW	3"	OD	5"	1.0	H	METAL PLATE	1	0mV	
ABA_013	56.7	1.0	61	02/01	4"	E	4"	OD	10"	1.0	H	WRENCH	1	0mV	
ABA_015	51.5	1.0	57	02/01	1"	S	3"	OD	4"	.2	H	METAL PLATE, SLAG PIECES	5	0mV	
ABA_020	39.3	1.0	65	02/01	2"	E	3"	OD	5"	1.0	H	METAL PLATE	1	0mV	
ABA_024	36.4	1.0	50	02/01	1"	S	3"	OD	4"	.2	H	METAL PLATE	1	1.5mV	
ABA_040	25.7	1.0	32	02/01	0"	N/A	4"	OD	6"	.1	H	NAILS, WASHER, INFLUENCED SURE WINDING ANOMALY	3	2mV	
ABA_044	23.5	1.0	34	02/01	4"	NW	4"	MD/OD	3"	.3	H	FUZE PIECES M404, BOLT, INFLUENCED ANOMALY UTS	3	4mV	
ABA_051	22.2	1.0	27	02/01	1"	N	3"	OD	3"	.2	H	METAL PLATE	1	0mV	AP
ABA_074	17.8	1.0	27	02/01	4"	E	3"	OD	4"	.2	H	NAIL	1	0mV	AP
ABA_080	20.8	1.0	40	02/01	12"	W	1"	OD	6"	.1	H	NAILS	5	0mV	AP
ABA_083	16.9	1.0	33	02/01	5"	SW	4"	OD/MD	6"	.2	H	NAIL, HEAT <sup>SLUG</sup> INFLUENCED ANOMALY TO NORTH	2	3mV	AP
ABA_102	14.4	1.0	15	02/01	3"	E	4"	MD	2"	.2	H	FUZE PIECES, INFLUENCED ADJACENT ANOMALY	2	6mV	
ABA_110	13.8	1.0	22	02/01	2"	SW	5"	MD/OD	2"	.2	H	FUZE PIECE, BOLT, SCRAP METAL	3	0mV	AP
7 - ABA_116	13.0	1.0	27	02/01	0"	N/A	3"	OD	6"	.2	H	NAILS, SCRAP METAL	3	2mV	
ABA_133	12.0	1.0	17	02/01	0"	SW	2"	OD	5"	.2	H	NAILS, SLAG	2	0mV	
ABA_159	10.1	1.0	18	02/01	0"	N/A	2"	OD	6"	.2	H	NAILS	2	0mV	AP
ABA_163	9.9	1.0	18	02/01	0"	N/A	2"	OD	3"	.3	H	SQUARE BOLT, SLAG	2	0mV	AP
ABA_165	9.8	1.0	18	02/01	0"	NW	3"	OD	3"	.1	H	SCRAP METAL, NAILS, INFLUENCED FROM N/A	3	2mV	
ABA_169	9.6	1.0	18	02/01	0"	N/A	4"	OD	6"	.2	V	NAIL	1	0mV	AP

Date Completed:

Sensor ID:

Reviewed By:

Date:

SAA - Small Area  
Geo Question

Light @ 757-784-7972



**Grid Drawing Sheet**

Site Name: <b>CHAAP ABANDONED BURN AREA</b>		Site Location (city/state): <b>BURN ALDA, NE</b>	
Grid Number: <b>ABANDONED BURN AREA</b>		Team Number: <b>1</b>	Date: <b>26 MAY 2020</b>
Grid X and Y Dimensions (check the appropriate box):			
<input type="checkbox"/> 30m x 30m	<input type="checkbox"/> 90ft x 90ft	<input type="checkbox"/> 100ft x 100ft	<input checked="" type="checkbox"/> 200ft x 200ft
<input checked="" type="checkbox"/> Other <b>400 ft x 200 ft</b>			
Draw in the Grid Box the areas not cleared due to obstacles, terrain, and etcetera. Draw MEC locations and other key data.			
Comments: <b>SURFACE SWEEP</b>			

HGL MR Form 15.28 (Sep 2010)



**Team Leader Grid Sheet**

Project Site Location (name, city and state): <b>CHAFF ABANDONED BURN AREA, ALDA, NE</b>		Team Number: <b>1</b>	Date: <b>26 MAY 2020</b>
Grid Number: <b>ABANDONED BURN AREA</b>	Total Anomalies Dug: <b>N/A SURFACE SEARCH</b>	Grid Completed Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Percent Complete: <b>100%</b>

**I. MEC items located.**

Item	Grid	Classification			Comments
		DMM	MPEH	UXO	
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

**II. Non-MEC items located.**

Type	Daily Total (pounds)	Comments
Cultural Debris (CD)	<b>10 LBS</b>	<b>FENCE POST</b>
Munitions Debris (MD)		
Range-related Debris (RD)		

**III. Comments:**

Team Leader (print name): <b>DONNIE KOETJE</b>	Signature: 
---	----------------

HGL MR Form 15.31 (Jan 2012)

## Equipment Certification Form

 Team # 1

 Team Leader D. KOETIE

Instrument #	SN #	Instrument #	SN #
1	58391631 (GARRETT)		
2	58391609 (GARRETT)		
3	266424 (SCHENSTEDT)		

Date	Operator Name	Instrument #	Pass/Fail/Comments
26 MAY 2020	ANTHONY COTA	1	PASS
26 MAY 2020	RANDAL COTA	2	PASS
26 MAY 2020	JOSH BAIR	3	PASS
27 MAY 2020	ANTHONY COTA	1	PASS
27 MAY 2020	RANDAL COTA	2	PASS
27 MAY 2020	JOSH BAIR	3	PASS
28 MAY 2020	DOWNIE KOETIE	1	PASS
28 MAY 2020	ANTHONY COTA	2	PASS
29 MAY 2020	ANTHONY COTA	1	PASS
29 MAY 2020	RANDAL COTA	2	PASS
29 MAY 2020	JOSH BAIR	3	PASS

Comments (Instruments taken out of service and reason, personnel changes):

# Equipment Certification Form

Team # 1

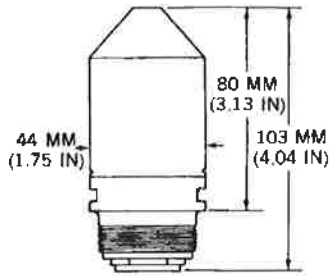
Team Leader DONNIE KOETJE

Instrument #	SN #	Instrument #	SN #
1	58391631 (GARRETT)		
2	58391609 (GARRETT)		
3	766424 (SCHONSTEDT)		

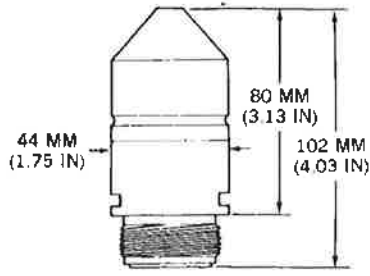
Date	Operator Name	Instrument #	Pass/Fail/Comments
01JUN2020	ANTHONY COTA	1	PASS
01JUN2020	RANDAL COTA	2	PASS
01JUN2020	DONNIE KOETJE	3	PASS
02JUN2020	ANTHONY COTA	1	PASS
02JUN2020	RANDAL COTA	2	PASS
02JUN2020	DONNIE KOETJE	3	PASS
03JUN2020	ANTHONY COTA	1	PASS
03JUN2020	RANDAL COTA	2	PASS
<del>03JUN2020</del>	<del>DONNIE KOETJE</del>	<del>3</del>	<del>DMK</del>

Comments (Instruments taken out of service and reason, personnel changes):

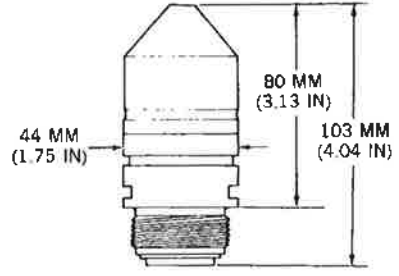




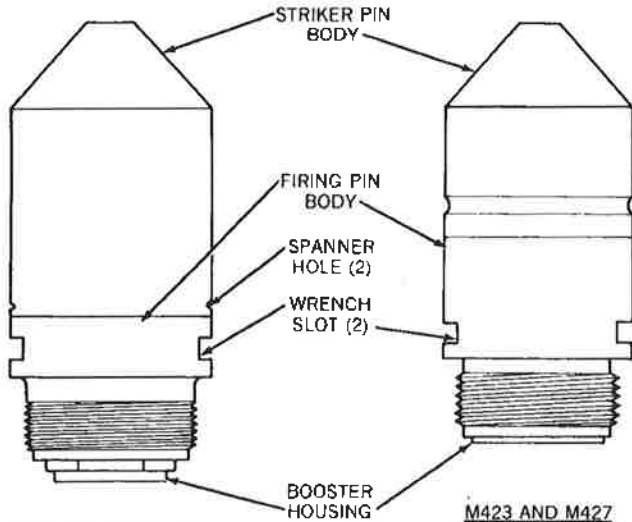
M423



M423 AND M427



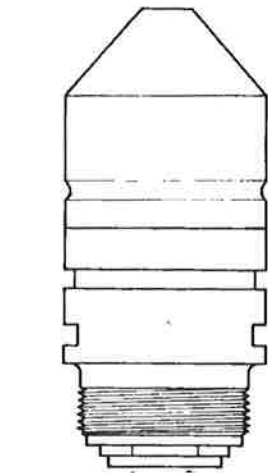
ALTERNATE APPEARANCE OF  
M423 AND M427



M423 WITH SCREWED  
ON STRIKER PIN BODY

M423 AND M427  
WITH CRIMPED ON  
STRIKER PIN BODY

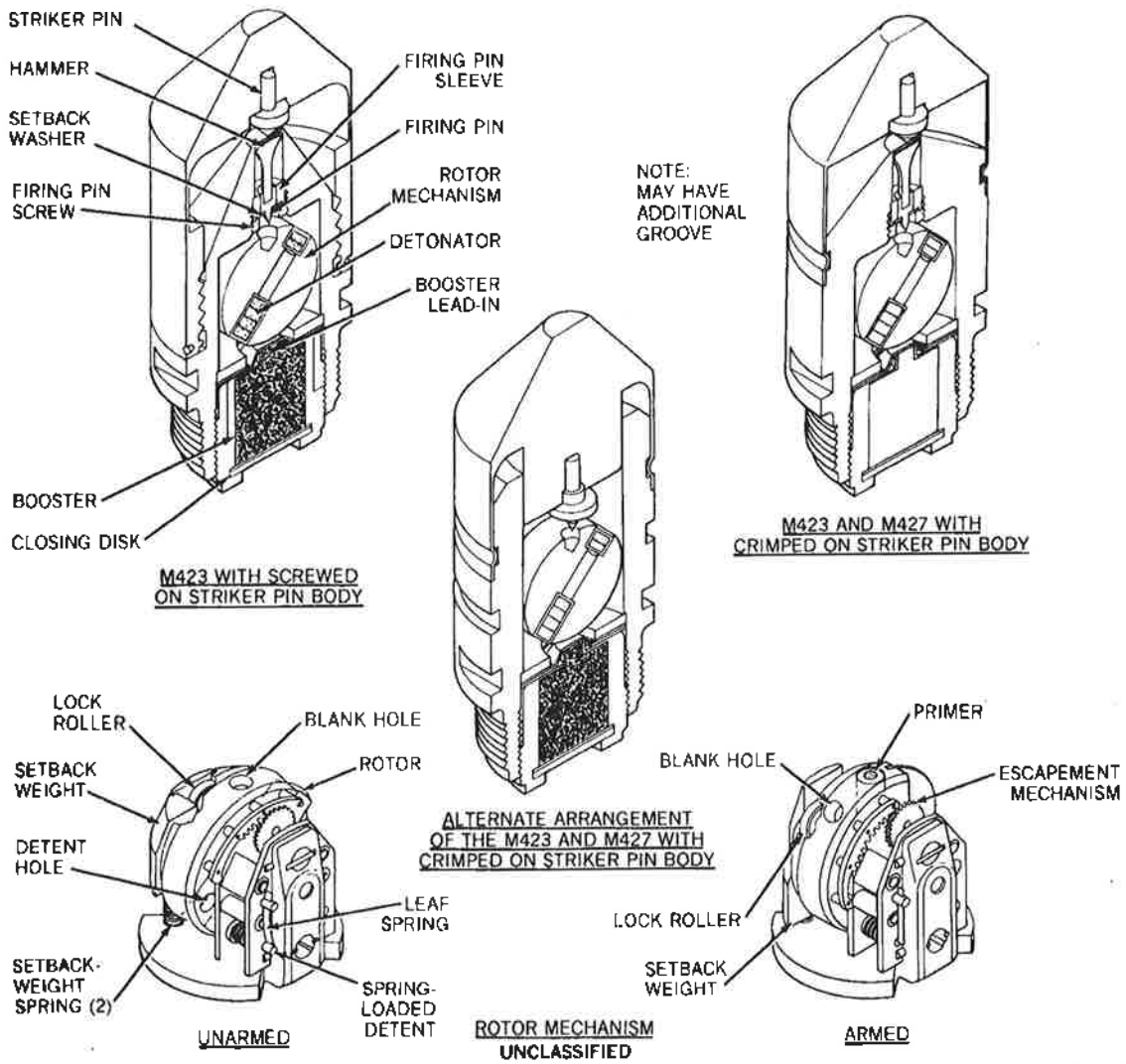
UNCLASSIFIED



ALTERNATE APPEARANCE OF  
M427 AND M423 WITH  
CRIMPED ON STRIKER PIN BODY

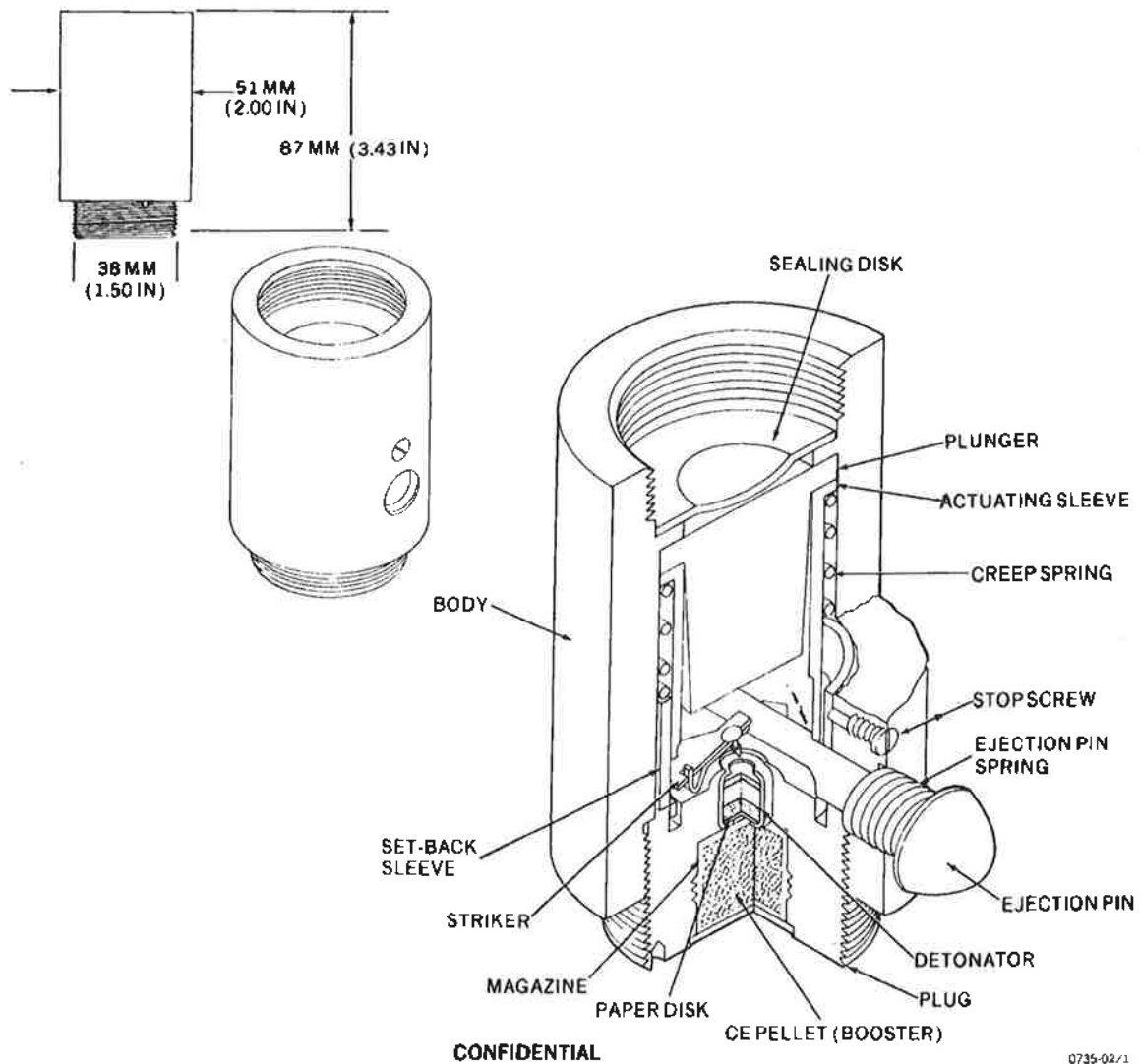
2136 02-1

THE M423 & M427 ROCKET FUZES



2136-02/2

GENERAL ARRANGEMENT OF THE FUZE



APPEARANCE, DIMENSIONS, & GENERAL ARRANGEMENT OF THE L5, M404 MARK 1 FUZE

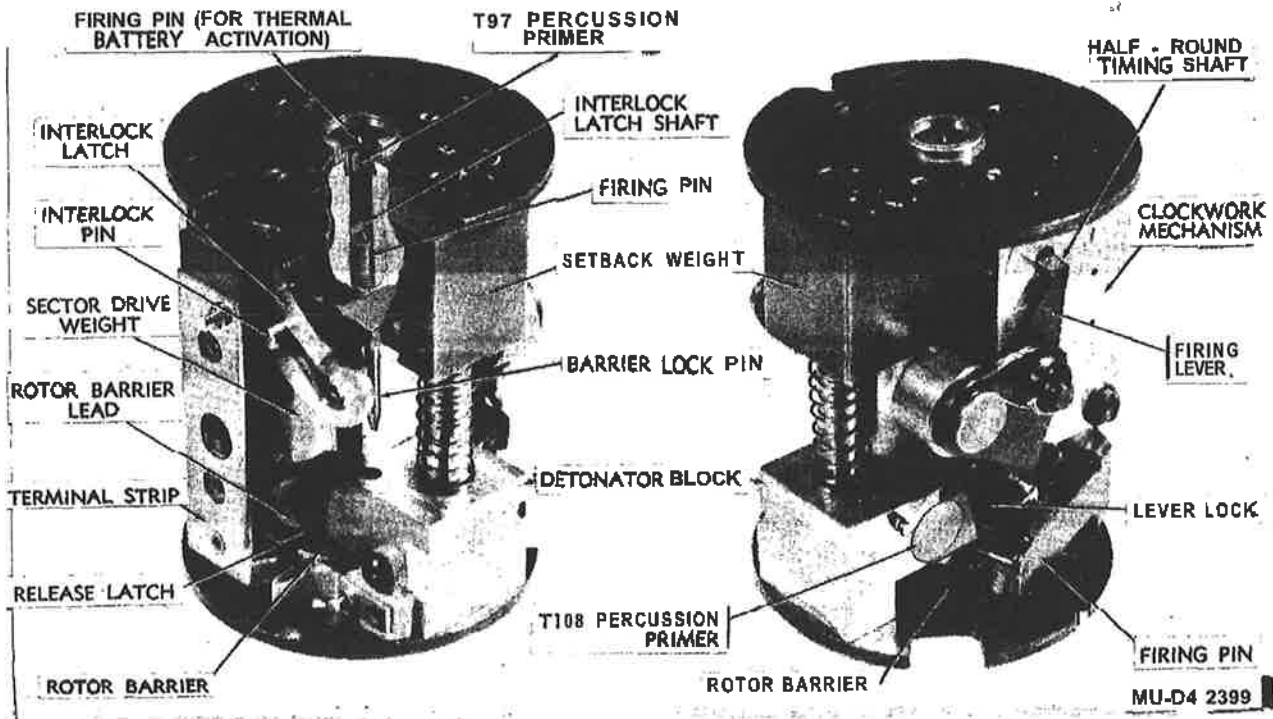


Figure 11-27. Two Views of Safety and Arming Device for M414 Fuze

provides electric power to the electronic head.

**NOTE**

If the rocket fails to maintain an acceleration of 19 g's for at least 400 feet of travel, the fuze will neither arm nor recycle.

- (3) When proper acceleration is maintained for a distance of 400 feet, a switch operates, allowing the firing capacitor to charge. The fuze is then fully armed.
  - (4) When the fuze properly senses the target, it discharges the firing capacitor through the electric detonator, initiating the explosive train.
- c. Self-Destruct Feature. A self-destruct element of the fuze begins to function as soon as the rotor barrier turns to the armed position. The self-destruct element will initiate the fuze explosive train after 6 to 10 seconds of the rocket flight.

**NOTE**

Before the fuze is inserted in the rocket head, the self-destruct element may be made inoperable by turning a small slotted pin in the side of the fuze body to the S.D. OFF position.

11-7.4 SAFETY PRECAUTIONS. General proximity (VT) fuze safety precautions regarding the approach, attack and disposal of this item must be observed.

**1 1-8 BASE DETONATING FUZES M400, M401, M404, M404A1, M404A2 and M405.**

11-8.1 IDENTIFICATION.

11-8.1.1 TYPE. The M400, M401, M404, M404A1, M404A2 fuzes are of the base-detonating (BD), direct-arming (arming pin), impact-fired (inertia plunger), nondelay type. The M405 is a dummy fuze similar in appearance to the M404A2 fuze. It simulates handling and arming pin ejection of the M404A2 fuze. The M400 and M401 are used in 2.36-inch

rockets. The M404, M404A1, M404A2 and M405 are used in 3.5-inch rockets.

11-8.1.2 PAINTING AND MARKING. The fuze designation and loading information is stamped into the body of the fuze. The fuze body is painted olive drab or black.

11-8.1.3 FITTINGS AND FEATURES. The M400 fuze has a safety pin and arming pin, which are visible externally. The M401 fuze (figure 11-28) has a safety band which holds the arming pin in a safe position and acts as a waterproofing clamp. The safety pin is permanently attached to the safety band. The arming pin of the M404, M404A1, and M404A2 fuzes is held in place by a safety band (figure 11-29).

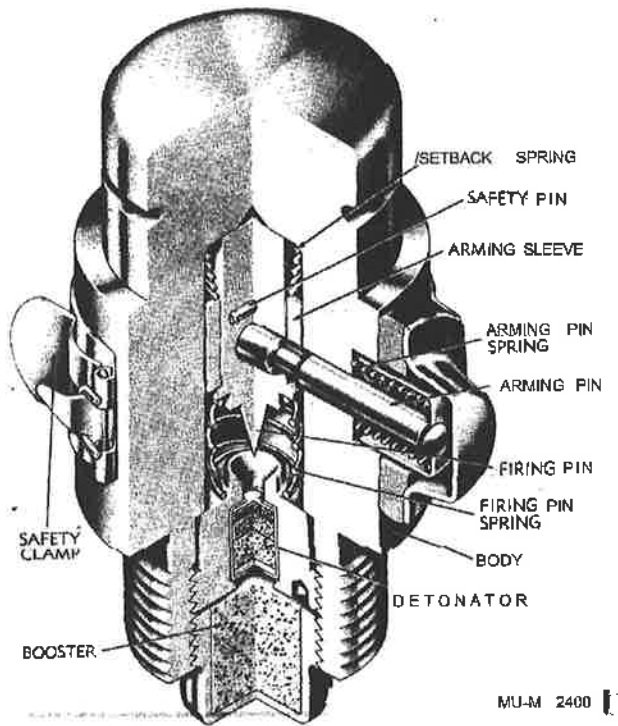


Figure 1 1-28. Cutaway View of M401 Fuze in the Unarmed Condition

11-8.1.4 MATERIALS. The M400 and M401 fuzes have steel bodies. The M404, M404A1, M404A2, and M405 fuzes have aluminum bodies.

11-8.2 HAZARDOUS COMPONENTS. These fuzes, except the M405, contain a detonator and a booster. The detonator consists of primer

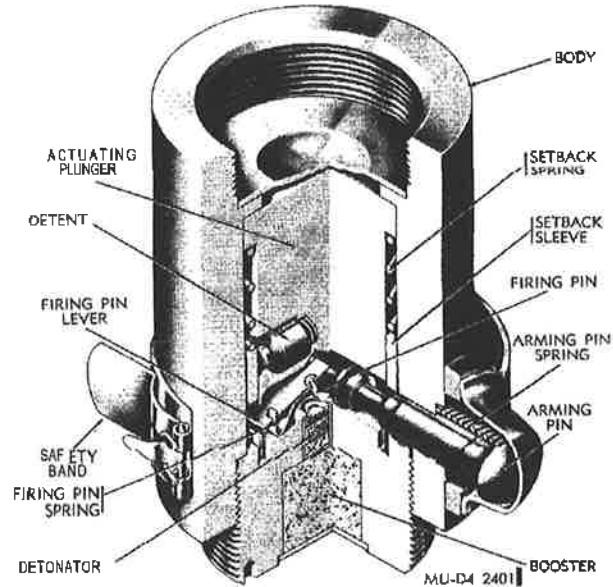


Figure 1 1-29. Cutaway View of M404A2 Fuze in the Unarmed Condition

mixture, lead azide and tetryl; the booster is tetryl. The M405 fuze is inert.

### 11-8.3 FUNCTIONING.

- a. M400 and M401 FUZES. Prior to launch, the safety pin is removed from the M400 fuze or the safety band is removed from the M401 fuze. The arming pin, which is held in position by the arming sleeve to prevent its ejection, keeps the firing pin from moving. When the rocket is launched, the arming sleeve compresses the setback spring and disengages itself from the arming pin. The arming pin spring forces the arming pin outward until it strikes the inner wall of the launcher. When the rocket leaves the launcher, the arming pin is ejected from the rocket by the arming pin spring, which arms the fuze. The firing pin spring prevents the firing pin from striking the detonator until impact. Upon impact, the firing pin overcomes the firing pin spring and pierces the detonator. This initiates the explosive train.
- b. M404, M404A1, and M404A2 FUZES. Prior to launch, the safety band is re-

moved from the rocket. This allows the spring-loaded arming pin to come in contact with the bore of the launcher. When the rocket is fired, inertia forces cause the setback sleeve to move rearward, compressing the setback spring and clearing the path of the arming pin. The setback sleeve is locked in the rearward position by a spring-loaded detent. When the rocket leaves the launcher, the arming pin is thrown clear of the fuze by the arming pin spring, thus arming the fuze. Upon impact, the actuating plunger

moves forward, striking the firing pin lever. This drives the firing pin into the detonator, which initiates the explosive train. These fuzes are rapid in action and sensitive to low-angle graze impacts. Fuzes M404, M404A1 and M404A2 contain a graze sensitive feature.

#### 11-8.4 SAFETY PRECAUTIONS

11-8.4.1 Observe all safety precautions regarding graze-sensitive fuzes.

1 I-8.4.2 Observe shaped charge precautions when disposing of warheads.

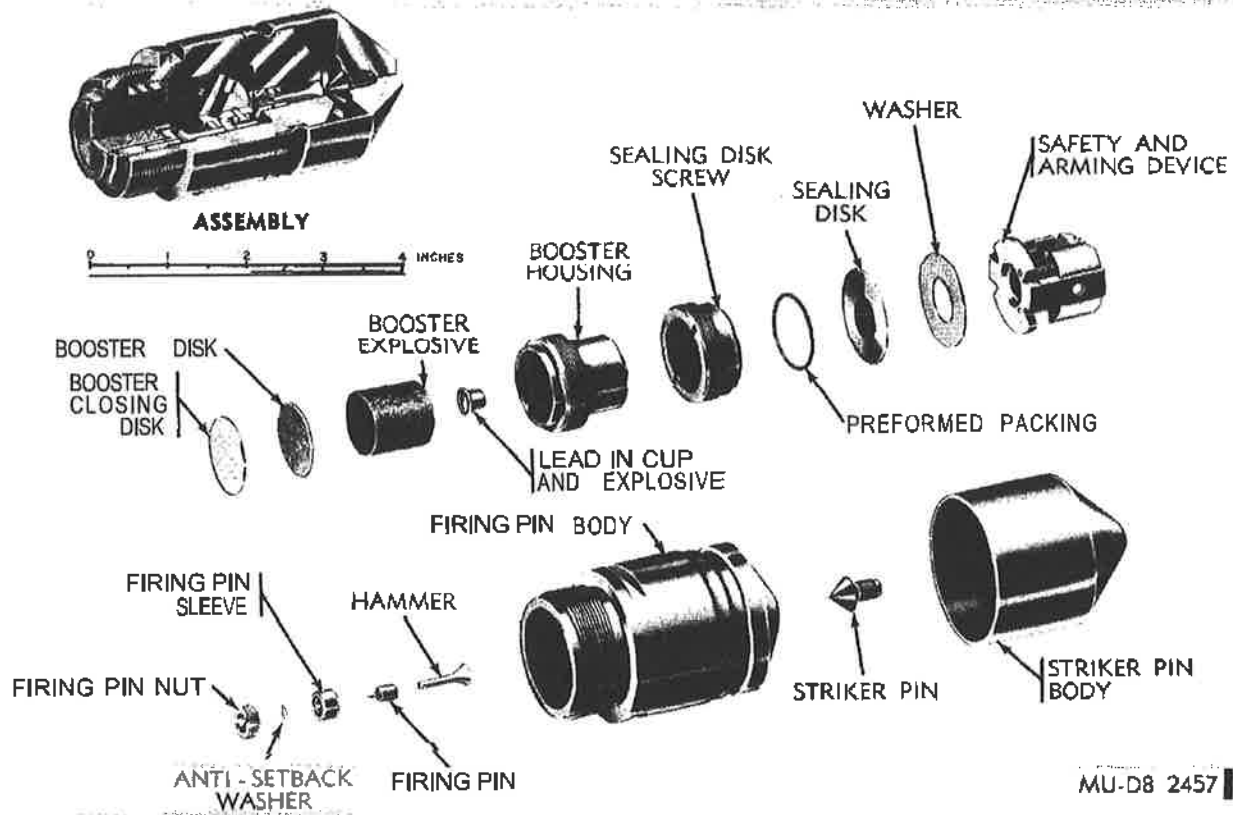


Figure 1 1-30 Cutaway and Exploded Views of Fuzes M423 and M427

**1 1-9 FUZES, ROCKET, PD, M423 AND M427.**

The fuzes covered in this paragraph may be used with the following 2.75 Inch Rocket Warheads: HE, M151 or XM229; Target Marker (HE) XM152, XM153, XM157 or XM158; or Smoke, WP, M156.

**11-9.1 IDENTIFICATION.**

**11-9.1.1 TYPE.** These fuzes are of the acceleration-delayed arming, impact-firing, point-initiating, instantaneous-action type.

**11-9.1.2 PAINTING AND MARKING.** The fuzes are painted olive drab and the fuze designation and loading data are stenciled in yellow.

**11-9.1.3 FITTINGS AND FEATURES.** The general physical characteristics and exploded view are shown in figure 11-30. The fuzes are

cylindrical with a flat-point conical ogive, and have wrench slots for fitting to the warhead. The fuzes have four major components: an aluminum striker pin body; an aluminum firing pin body; a safety and arming device assembly, and a steel booster housing which contains the lead-in cup explosive charge and the booster charge.

**11-9.1.4 WEIGHTS.** Each fuze weighs approximately one pound.

**11-9.2 HAZARDOUS COMPONENTS.**

**11-9.2.1** The primer contains lead azide and primer mix tetryl; the detonator contains lead azide, the lead-in cup and the booster contain tetryl.

**1 1-9.3 FUNCTIONING.**

a. Fuze M423 has a short arming time for

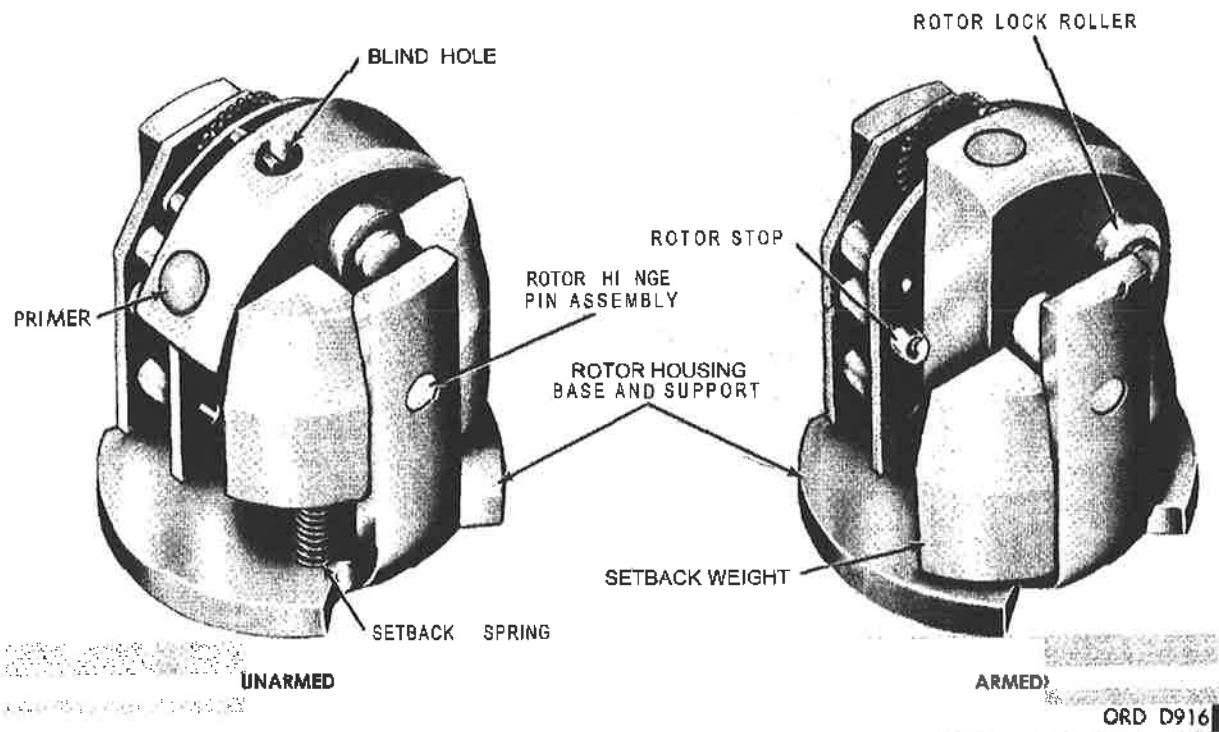


Figure 11-31 Safety and Arming Device

use by low performance aircraft. The M427 differs only in arming time, and is used by high-performance aircraft.

- b. When the rocket is fired, inertia forces cause the setback weight of the safety and arming device (fig. 11-31) to move rearward, compressing the setback spring. This releases the unbalanced rotor to rotate and lock in place in the armed position. When the fuze strikes the target, the cone of the striker pin body is driven rearward, forcing the striker pin to drive the hammer into the firing pin. The firing pin is thus driven

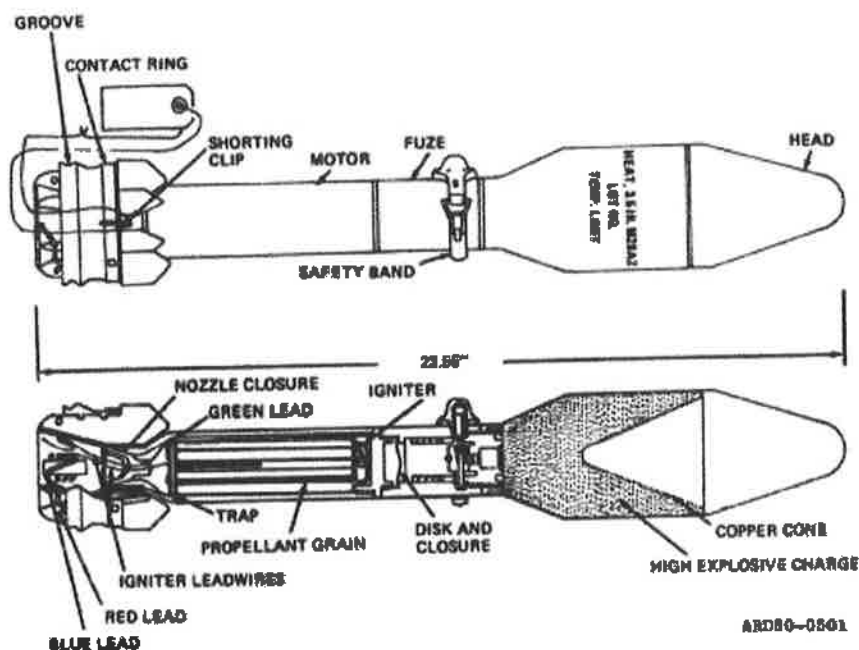
through the antisetback washer into the primer. This initiates the explosive train which, in turn, detonates the warhead explosive.

#### 11-9.4 SAFETY PRECAUTIONS.

- a. Positive identification of the rocket warhead and fuze must be made.
- b. Initial movement of an imbedded rocket warhead should be done from a remote position.
- c. Do not drop or jar the rocket warhead and take care not to strike the fuze.



# ROCKET, HEAT, 3.5 INCH, M28A2



*Description.* This is a high-explosive antitank rocket. The complete round is an assembly consisting of a head, fuze, motor, nozzle and fin assembly.

*Head.* The head, which contains the explosive charge (composition B, 1.82 lb.), is of light steel construction. It is cylindrical in shape, 3.5 inches in diameter, with a conically shaped ogive, and tapers to 2 inches in diameter at the rear. It contains an internal cone, which provides for shaping the explosive charge. The rear of the head is threaded internally for attachment of base detonating fuze.

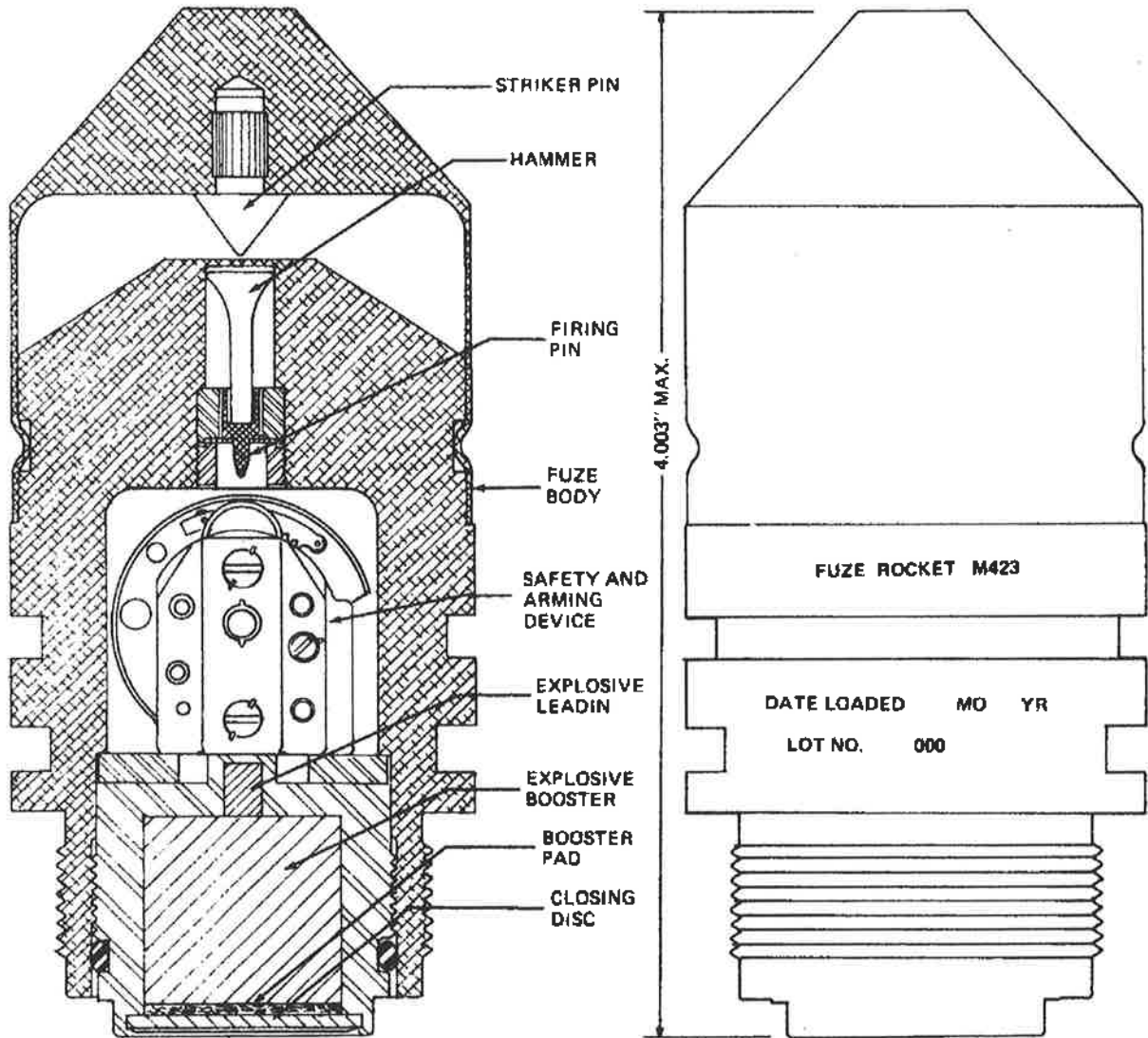
*Fuze.* The base-detonating fuze is of the simple inertia type which functions with non-delay action upon impact. The explosive train includes a detonator and a booster. An ejection pin, which passes through the fuze body and prevents movement of the internal parts, is provided to preclude accidental functioning during shipment, handling, and firing. The safety band covers the head of the ejection pin and prevents it from moving shipping and handling.

*Motor.* The motor consists of a body, closure, trap and spacer assembly, propellant, igniter with electric squib and leads, nozzle closure, and nozzle and fin assembly.

<b>Over-all length</b> .....	23.67 inches
<b>Diameter</b> .....	3.5 inches
<b>Weight</b> .....	8.61 pounds
<b>Filler</b> .....	Comp B
<b>Filler weight</b> .....	1.82 pound
<b>Propellant</b> .....	M7 propellant powder
<b>Propellant weight</b> .....	12 grains
<b>Igniter</b> .....	M20

**Reference:** TM 9-1950, *Rockets*, July 1950, TM 43-0001-30, *Army Data Sheets, Rockets, Rockets Systems, Rocket fuzes, Rocket Motors*, December 1981

**FUZE, POINT DETONATING, M423 (M427)**



ARD80-0514

**Type Classification:**

STD AMCTCM 3233

**Use:**

These fuzes are oblique impact sensitive, point detonating, super-quick types. Refer to paragraph 3-1, Table 3-1 for the authorized warheads which use this fuze.

**Description:**

These fuzes consist of the following major assemblies:

- (1) The striker-pin body assembly consists of an aluminum body with a press-fitted steel striker pin. The lower portion of the body is secured to the firing pin body by a circumferential crimp. Upon impact,

crush-up initiates the primer and subsequent explosive train.

(2) The firing pin body assembly consists of a firing pin body, plastic hammer, firing pin sleeve, anti-setback washer, firing pin nut, and firing pin. The threads on the lower portion of the body assembly are used for assembling the fuze to the warhead.

(3) The safety-and-arming device consists of a rotor-housing assembly and unbalanced rotor assembly, an escapement assembly and setback weight. The unbalanced rotor assembly houses the primer and detonator and is maintained in the unarmed (out-of-line) position.

(4) The booster assembly consists of a booster housing, lead-in cup and appropriate explosive charges. The threads on the booster housing enable the booster assembly to be threaded into the lower portion of the firing pin body.

Differences between Models:

Externally the M427 fuze is identical to the M423 fuze. The M427 differs from the M423 in that its internal construction is designed to produce the longer arming time and arming distance required for launch from high-speed aircraft. For the authorized warheads which use these fuzes, refer to paragraph 3-2, Table 3-1.

Functioning:

When the rocket motor is fired, sustained acceleration permits the set-back (inertial mass) weight to move rearward. This releases the unbalanced rotor which, in rotating, drives the escapement and gear assembly. The rotor arms when it

has traveled the specified arming distance from the launcher. It is locked in the armed position by a spring-loaded pin. The rotor will return to the unarmed position if the minimum rocket energy (product of acceleration and time) is not sustained throughout the arming distance. Upon impact, the striker-pin body walls are crushed between the target and the firing pin body. The firing pin then impacts with the safety and arming mechanism, firing the primer and detonator, respectively. The detonator initiates the explosive train.

Tabulated Data:

Models	-----	M423, M427
Type	-----	Mechanical, point-detonating
Weight	-----	0.75 lb
Length (total)	-----	4.0 in.
Intrusion	-----	0.90 in.
Diameter	-----	1.75 in.

Shipping and storage data:

Storage class/	
SCG	-----M423-1.2 (04) M427-1.1
DOT shipping	
class	-----M423-C & M427-A
DOT	
designation	----- DETONATING FUZES, CLASS A/C EXPLOSIVES - HANDLE CARE- FULLY DO NOT STORE OR LOAD WITH ANY HIGH EXPLOSIVES
Field storage	--- Group B

DODAC:

M 4 2 3	-----	1340-J349
M 4 2 7	-----	1340-J346

**Drawing numbers:**  
 M 4 2 3 ..... 8883683  
 M427 ..... 8883745

**Color** ..... Olive drab w/black markings

**Temperature Limits:**  
**Firing** ..... -65° to +165°F (-53.35° to +73.15°C)  
**Storage** ..... -65° to +165°F (-53.35° to +73.15°C)

**Explosive: train:**  
 Primer ..... Stab M104  
 Detonator ..... Mk 59  
 Load ..... Tetryl  
 Booster ..... Tetryl

**Explosive weight** ..... 0.32 oz (9g)

**Arming distance:**  
 M 4 2 3 ..... 46.9-101 yd (43-92 m)  
 M427 ..... 220-396 yd (200-360 m)

**Rocket terminal angle** ..... 5°- 90°

**Packing** ..... 12 per metal container; 2 containers per wire bound box

**Packing box:**  
 Weight ..... 39.8 lb (17910 g)  
 Dimensions ..... 14-5/8 in. x 12-13/16 in. x 9-1/8 in.

**Cube** ..... 1.0 ft<sup>3</sup>



**DEMIL METALS, INC.**

601 N. Skokie Blvd  
Northbrook, IL 60062

Date: 06/26/20

From: Mike Schaffer  
Demil Metals, Inc.  
601 N Skokie Blvd. #302  
Northbrook, IL. 60062

To: HGL Inc.  
ATTN: Sonny Richardson  
4835 University Square Suite # 15  
Huntsville, Al. 35816

SUBJECT: Certification of Destruction

Demil Metals, Inc., certifies that the contents of the sealed container received on 6/08/20 from CHAAP Grand Island, Nebraska, Prime Contract # W9128F-16-D-0014, PO# 2020-00272, Project # AT3001, ATI-CHAAP, HGL Inc., project site were demilitarized in accordance with guidelines in DoD 4160.21-IVI-1 and have been shredded and are only identifiable by their basic content.

*Container ID # USACE-CHAAP-ATI/HGL-0001  
Seal# 799393*

Signed:

DEMIL METALS, INC  
P.O. BOX 126  
GLENCOE, IL 60022

Name: Michael Schaffer

Point of Contact Information: [mike@demilmetals.com](mailto:mike@demilmetals.com) 847-929-9650

DD FORM 1348-1A, JUL 91 ISSUE RELEASE/RECEIPT DOCUMENT SIN 0102-LF-114-5000

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Material is from the former Cornhusker Army Ammunition Plant, Grand Island, NE under USACE Contract: W9128F-16-D-0014 Task Order No. 0002

This material was removed from the South Fuze Destruction Area and Abandoned Burning Ground sites.

Container ID Number: USACE-CHAAP-ATI/HGL-0001  
Tampor seal number: 799393

5. DOC	6. NMFC	7. FRT RATE	8. TYPE CARGO	9. PS
6/3/20			MDAS	
10. QTY. REC'D	11. UP	12. UNIT WEIGHT	13. UNIT CUBE	14. UFC
1		4.9 lbs		
16. FREIGHT CLASSIFICATION NOMENCLATURE				
17. ITEM NOMENCLATURE				
Mixed Metals, Aluminum and steel				
18. TY CONT	19. NO CONT	20. TOTAL WEIGHT	21. TOTAL CUBE	
22. RECEIVED BY			23. DATE RECEIVED	

"This certifies and verifies that the material listed has been 100 percent inspected and to the best of our knowledge and belief, is inert and/ or free of explosives hazards or related materials."

Certified By: *E. Richardson*  
E. Richardson, Senior UXO Supervisor  
HydroGeologic, Inc.  
4825 University Square, Suite 6  
Huntsville, AL 35816  
Cell: 610-329-9886

Verified By: *A. Indelicato*  
A. Indelicato, UXO Quality Control  
HydroGeologic, Inc.  
4825 University Square, Suite 6  
Huntsville, AL 35816  
Cell: 970-462-6581

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