



Anniston Chemical Activity



OUTLINE

- **Anniston Chemical Activity
Organization & Mission**
- **Chemical Stockpile Emergency
Preparedness Program (CSEPP)**
- **Emergency Operations Center
(EOC) Operations**



Anniston Chemical Activity



Timeline

<u>Activity</u>	<u>Year</u>
▪ Anniston Army Depot established:	1942
▪ First Chemical Weapons Arrive:	1961
▪ ANCA Organized as a tenant activity on ANAD	1995
▪ ANCDF Construction Concluded:	2001
▪ Chemical Materials Agency	2003
▪ ANCDF Begins Chemical Weapons Disposal Operations:	2003
▪ Conclude ANCDF Operations:	2011



ORGANIZATION



Army Materiel Command (AMC)



U.S. Army Chemical Materials Agency (CMA)



CMA Operations Directorate



- Anniston Chemical Activity*
- Blue Grass Chemical Activity*
- Deseret Chemical Depot*
- Edgewood Chemical Activity*
- Newport Chemical Depot*
- Pine Bluff Chemical Activity*
- Pueblo Chemical Depot*
- Umatilla Chemical Depot*



The Anniston Team



Anniston Army Depot-TACOM

- IRF Commander
- Base operations & security
- Support to chemical storage, CAIRA & treaty compliance operations
- Environmental compliance
- Agreements with off-post jurisdictions

Anniston Chemical Activity-CMA

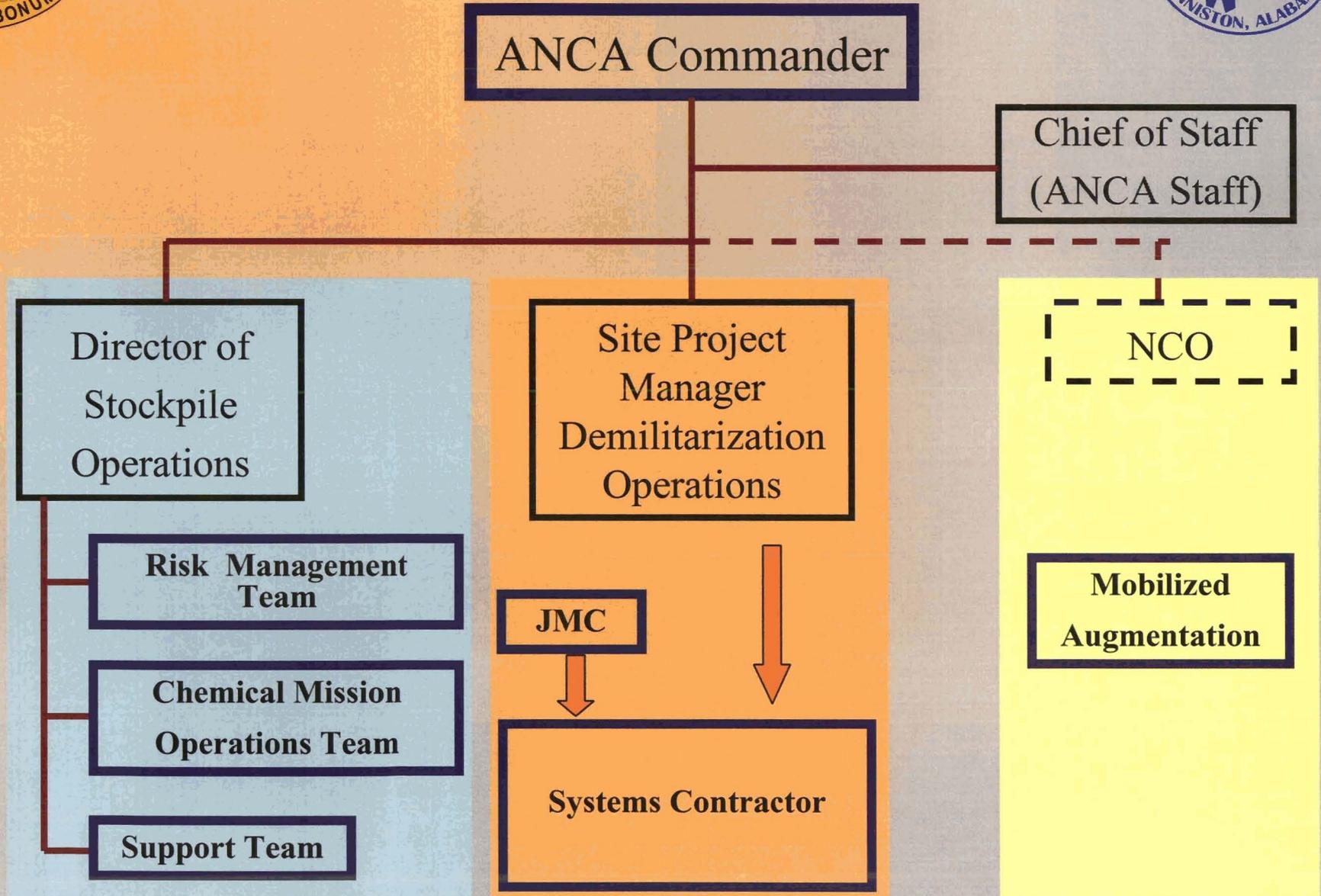
- Chemical surety
- Stockpile surveillance
- Emergency response & mgt
- CAIRA
- Demilitarization
- Treaty support
- Public Affairs

MEDCOM

722 EOD



ANCA Organization





ANCA's Mission



- **Safely manage, store, and destroy the U.S. Stockpile of Unitary Chemical Weapons while ensuring maximum protection to the environment, general public, and personnel involved.**
- **Prepare for and respond to chemical accidents/incidents**
Plan, manage, and execute treaty Responsibilities



Treaty Mission



➔ **Plan, manage, and execute treaty responsibilities:**

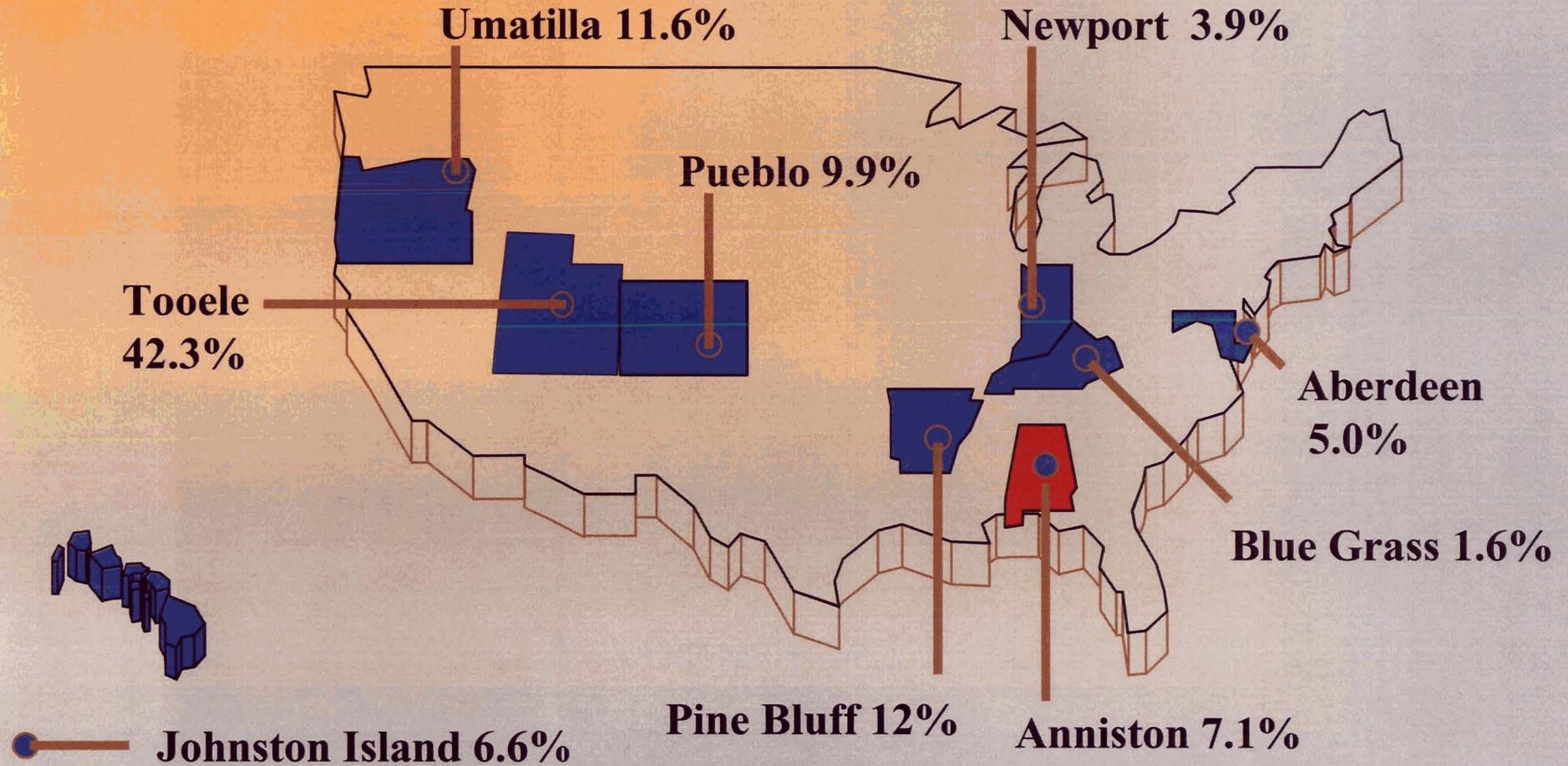
➔ **ANCA and ANAD**

➔ **Chemical Weapons Convention (CWC):**

- Destroy chemical stockpiles by 2009
- Initial verification: Nov 97
- Systematic inspection: Aug 98
- Systematic inspection: Aug / Sep 99
- Systematic inspection: Sep 00, 01, 02, 03, 04, 05

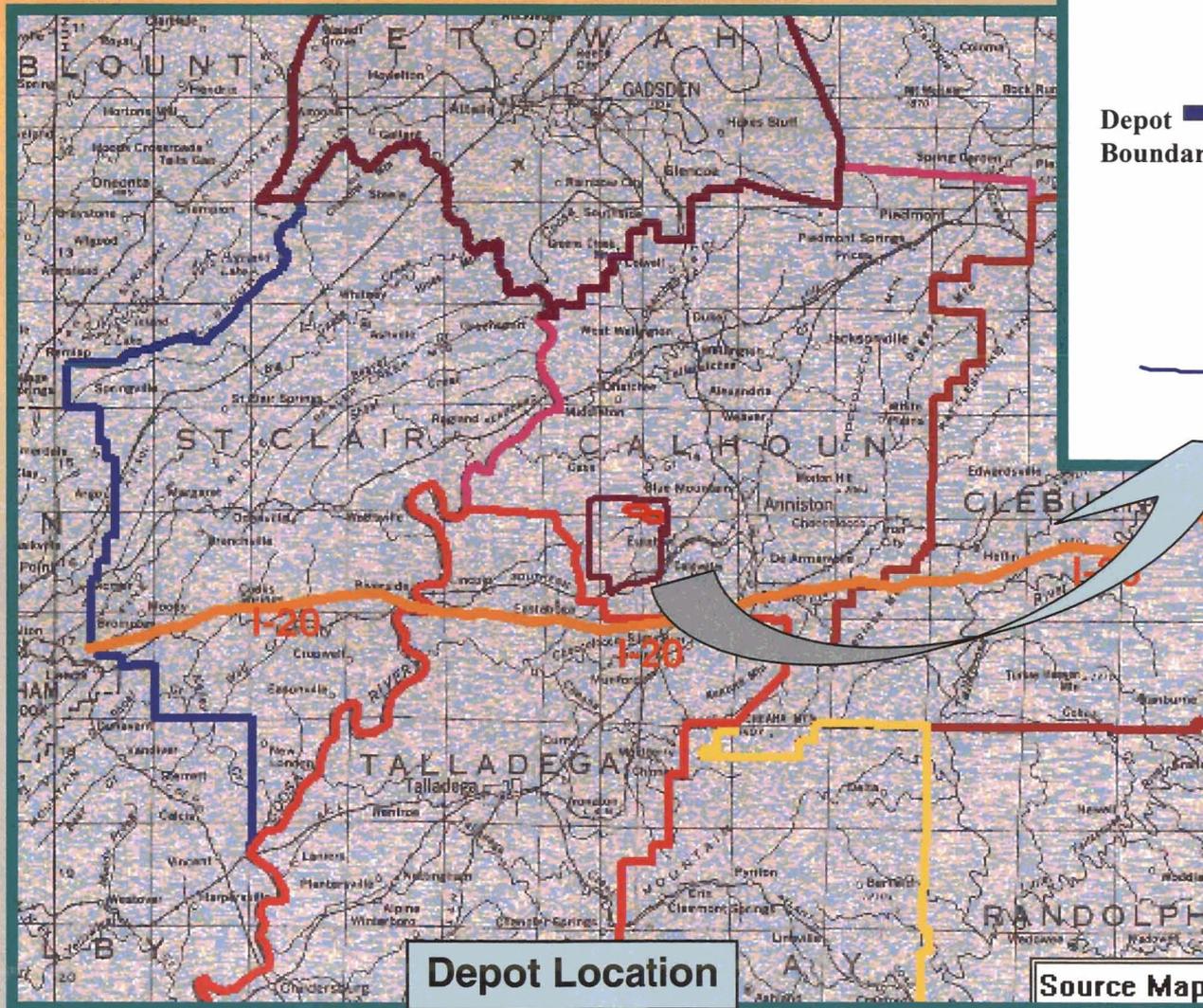
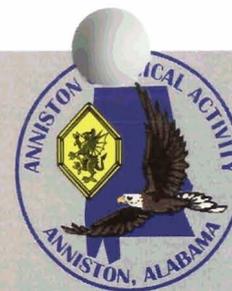


CHEMICAL WEAPONS STORAGE SITES



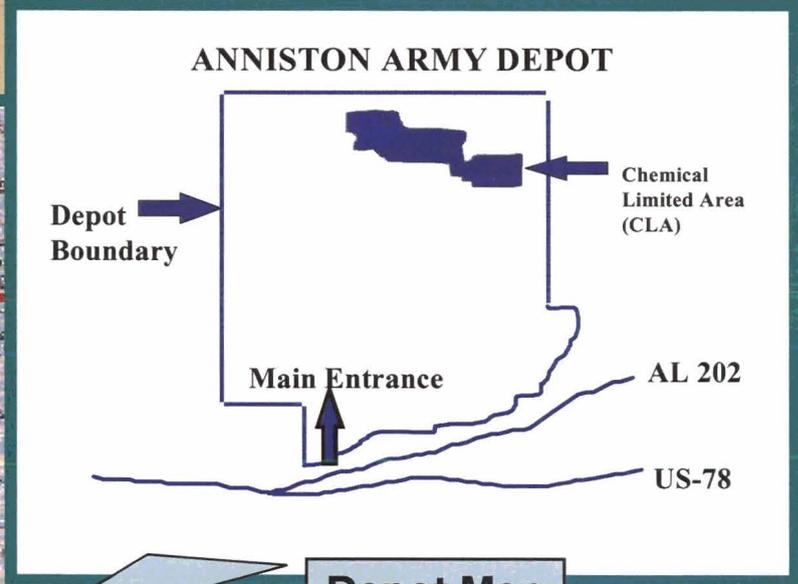


Anniston Army Depot Location

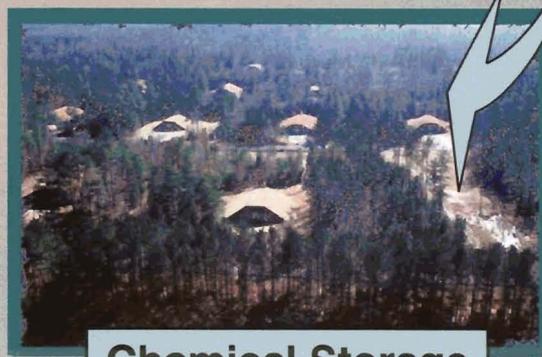


Depot Location

Source Map



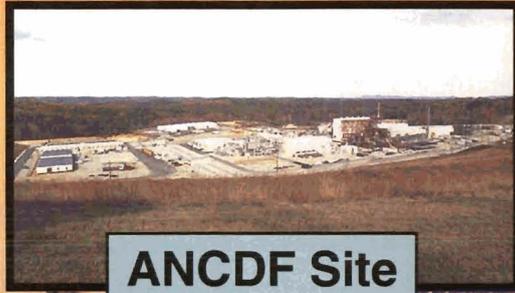
Depot Map



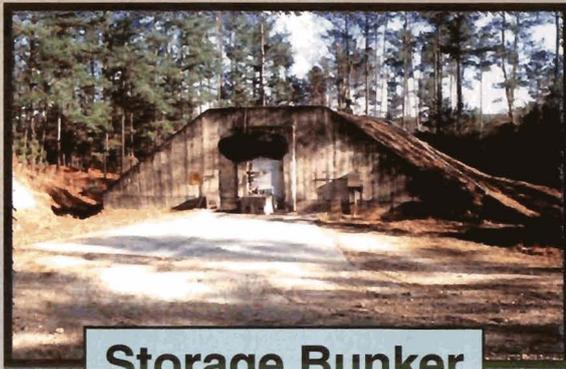
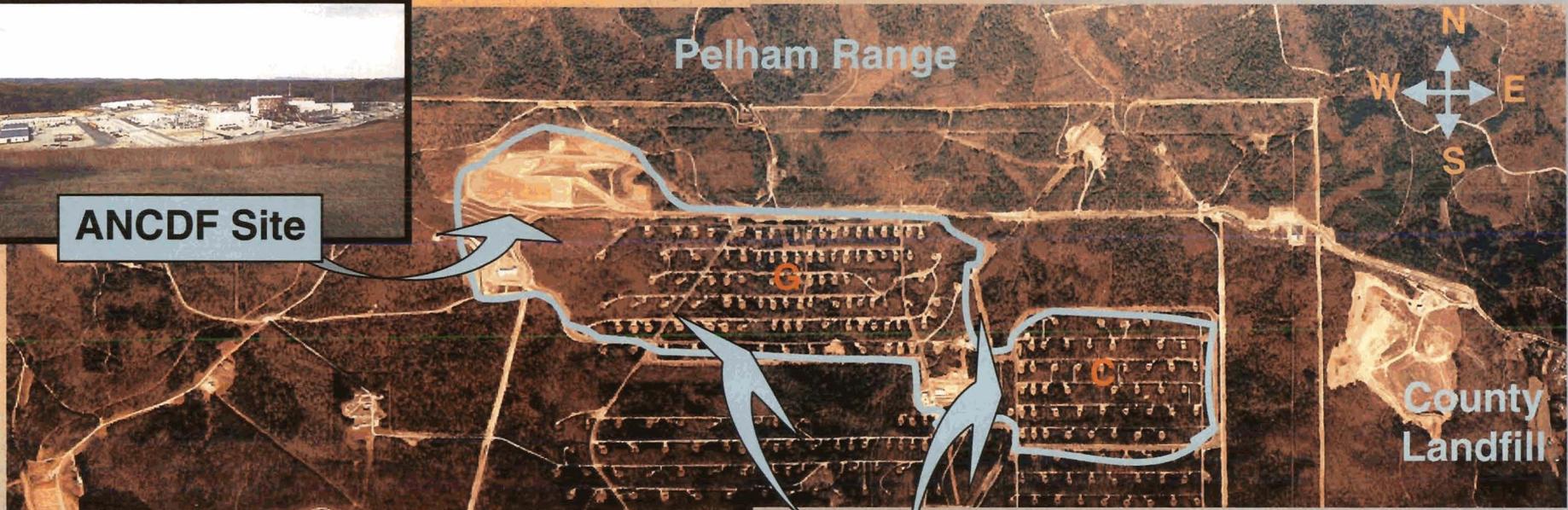
Chemical Storage



Chemical Limited Area (CLA)

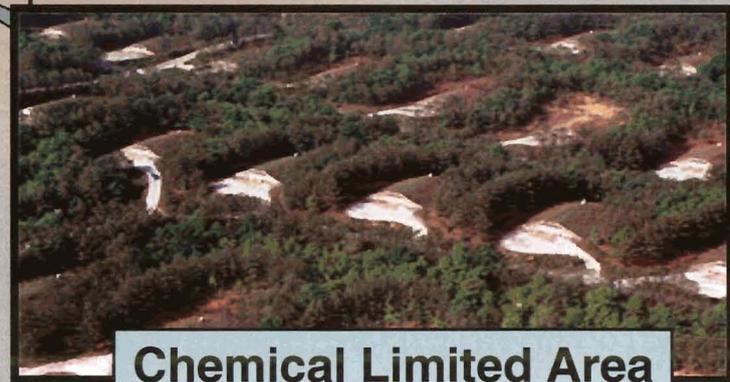


ANCDF Site



Storage Bunker

**155 Bunkers
797 Acres**



Chemical Limited Area



Enhanced On-Site Containers (EONCs)



EONC used to transport munitions for Demilitarization



ANCDF Project



- **Westinghouse Wins Contract:** 29 Feb 96
 - **Contract Value:** \$770 Million
 - **Equipment Value:** \$100 Million
- **Alabama Issued Permit:** 19 Jun 97
- **Notice to Proceed:** 20 Jun 97
- **Construction Completed:** 8 Jun 01
- **Agent Disposal Began:** 9 Aug 03



Chemical Surety Program



ANCA COMMANDER'S GOALS

- **Ensure the safety and security of stockpile.**
- **Ensure reliability of personnel.**
- **Maintain safe and secure environment.**
- **Deny opportunities for unauthorized access.**
- **Ensure readiness.**
- **Safe destruction of weapons stockpile**
- **Ensure contracts meet requirement of AR 50-6**



Chemical Surety

- **Primary Functions:**
 - **Surety Program Management**
 - **Personnel Reliability Program**
 - **Chemical Accident/Incident Response and Assistance (CAIRA)**
- **Monitor all areas involving:**
 - **Reliability of Personnel**
 - **Safety**
 - **Security**



Chemical Surety Board



- **Chaired by ANAD Commander.**
- **Co-Chaired by ANCA Commander.**
- **Consists of representatives (members) from ANAD, TMDE, ANCDF, ANCA, MEDDAC, and the ANCA/ANAD Commanders.**
- **Purpose:**
 - **To assist the ANAD Commander with implementing and maintaining the Chemical Surety Program IAW AR 50-6**





CAIRA



45 TEAMS

- **434 Personnel (including fire, security, & ANCDF)**
- **each trained for specific duties**
- **(hazard analysis, command and control, monitoring, decontamination, medical, etc.)**





CAIRA OBJECTIVES



- **Save lives.**
- **Reduce/eliminate toxic downwind hazard.**
- **Reduce the spread of contamination.**
- **Provide timely and accurate status reports.**
- **Terrorist scenario - Recapture surety materiel without permitting agent release.**

And.....



CAIRA OBJECTIVES



- **Maintain public confidence in the ability of the Army to respond to a CAI**





CAIRA EXERCISES

- AR 50-6 and DA Pam 50-6 mandate a quarterly exercise.
- DA Pam 50-6 requires that one of the quarterly exercises be an annual exercise with local and federal agencies.



COMMAND & CONTROL

- **The Installation Commander serves as the Initial Response Force Commander (IRFC) / On-Scene Coordinator (OSC).**

(DA Pam 50-6, paragraph 2-8(d)(1))



IRF Commander's Duties



- Establishes and maintains an IRF.
- Develops & implements an IRF training program.
- Evaluates, by the use of an exercise program, the IRF's ability to respond.
- Controls all response, logistical, and administrative activities during a Chemical Accident/Incident (CAI).
- Protects the public from health and safety hazards



Emergency Operations Center



Control center for . . .

- **Daily chemical operations**
- **Emergency response to chemical accident/incidents**
- **24-hour operations since Jan 98**



Daily EOC Operations



Assess response capability.

Predict downwind hazard.

Notify off-post community and recommend protective actions.

Monitor field operations and weather conditions.



EOC Features



Communications

- Monitor all radio nets
- Separate phone system
- CSEPP Hotline
- Depot Hotline (red phone)
- 800mhz radio system
- Recording of all voice communications

Weather Monitoring

- Met towers
- Doppler weather radar
- National Weather Service hotline
- Lightning detection equipment
- Meteorologist support

Automation

- Emergency Management Information Systems (EMIS 3.1)
- Automated recall system



Daily EOC Operations



Info received in EOC

- Hazard analyzed/threat determined
- Depot sirens activated
- Depot hotline/automated recall system activated
- PAR and downwind hazard prediction broadcast to off-post community
- CSEPP hotline activated for initial notification to off-post (target: 5 minutes from EOC notification)
- EOC staff responds
- Emergency response actions directed from EOC

DeMil & CLA Reuse

Features

159 earth covered ammunition magazines with IDS

796.8 acres

Double concertina fences with IDS and surveillance cameras

Separate access road with guard post and access control facilities.

Remote location: 20,000 acre wooded Pelham Range to North, 15,000 acre wooded Anniston Army Depot to South.

17,961 SF ammunition maintenance facility with 30 inch thick blast walls, vapor containment with charcoal filtration and 3 earth covered ammunition storage igloos

17,977 SF administrative facilities

3 laboratories consisting of 13,565 SF.

1,000,000 gallon water storage/fire protection tank.

2 MW electrical substation

XX MW back-up generators

4,167 SF Health Clinic

28,804 SF Warehouse

12,596 SF Hazardous Material Storage Building

14,012 SF Maintenance Shop

Close proximity to ammunition demolition and burning areas.

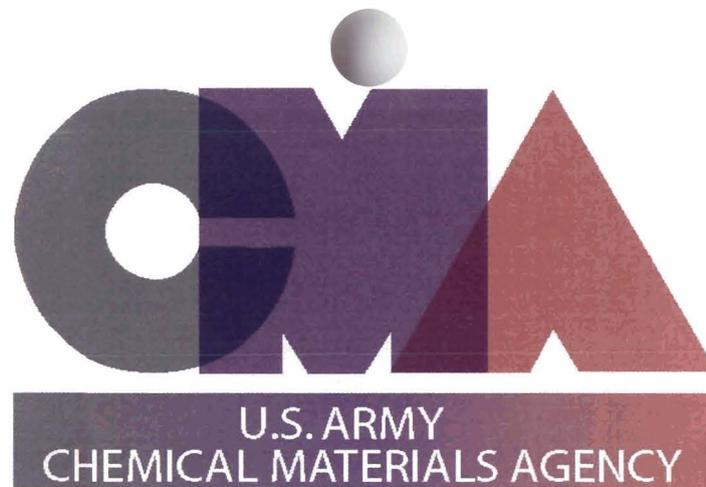
Potential Reuse Options

Missile development area

“Black” project development/asset storage

Other sensitive project development/asset storage

Conventional ammunition storage.



Anniston Chemical Agent Disposal Facility Operations Briefing

**ANCDF Field Office
3580 Morrisville Road
Anniston, AL 36201**

Mission:

“Destroy the U.S. Stockpile of Unitary Chemical Weapons while ensuring maximum protection to the environment, general public, and personnel involved in the destruction effort.”

4 Key Messages

- ① **Chemical Weapons are safely stored.**
- ② **Disposal is safer than continued storage.**
- ③ **Incineration is a proven, safe, and efficient disposal process.**
- ④ **The Army IS committed to the safety of the community and the environment.**

ANCDF Stakeholders

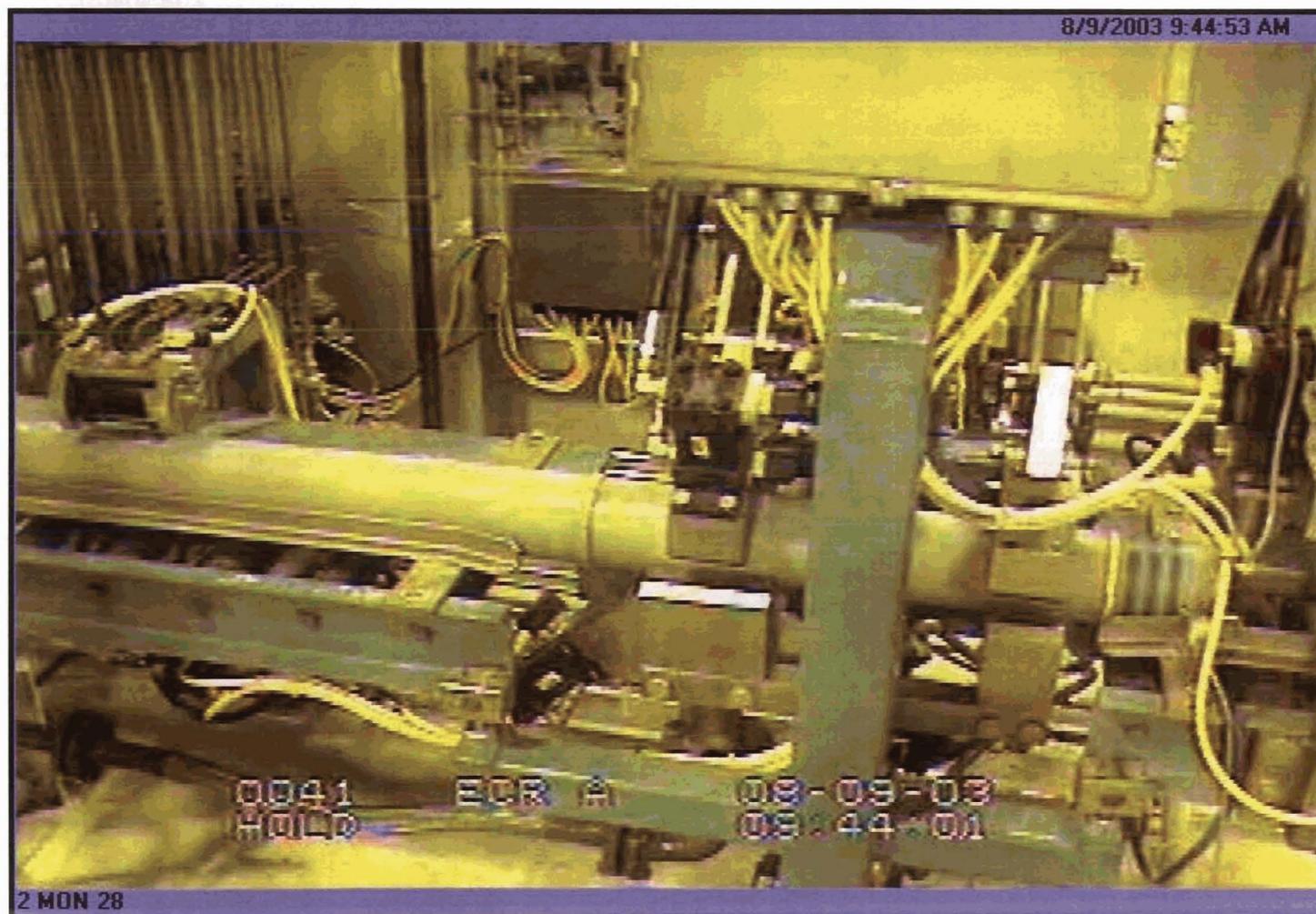
- **Public**
- **Congress**
- **National Academy of Sciences**
- **Department of Health and Human Services (DHHS)/ Centers for Disease Control (CDC)**
- **Secretary of the Army**
- **Secretary of Defense**
- **Federal Environmental Protection Agency (EPA)**
- **State and Local Environmental and Emergency Preparedness Agencies**
- **Occupational Safety and Health Administration**
- **Citizens' Advisory Commissions**

Anniston Project Update

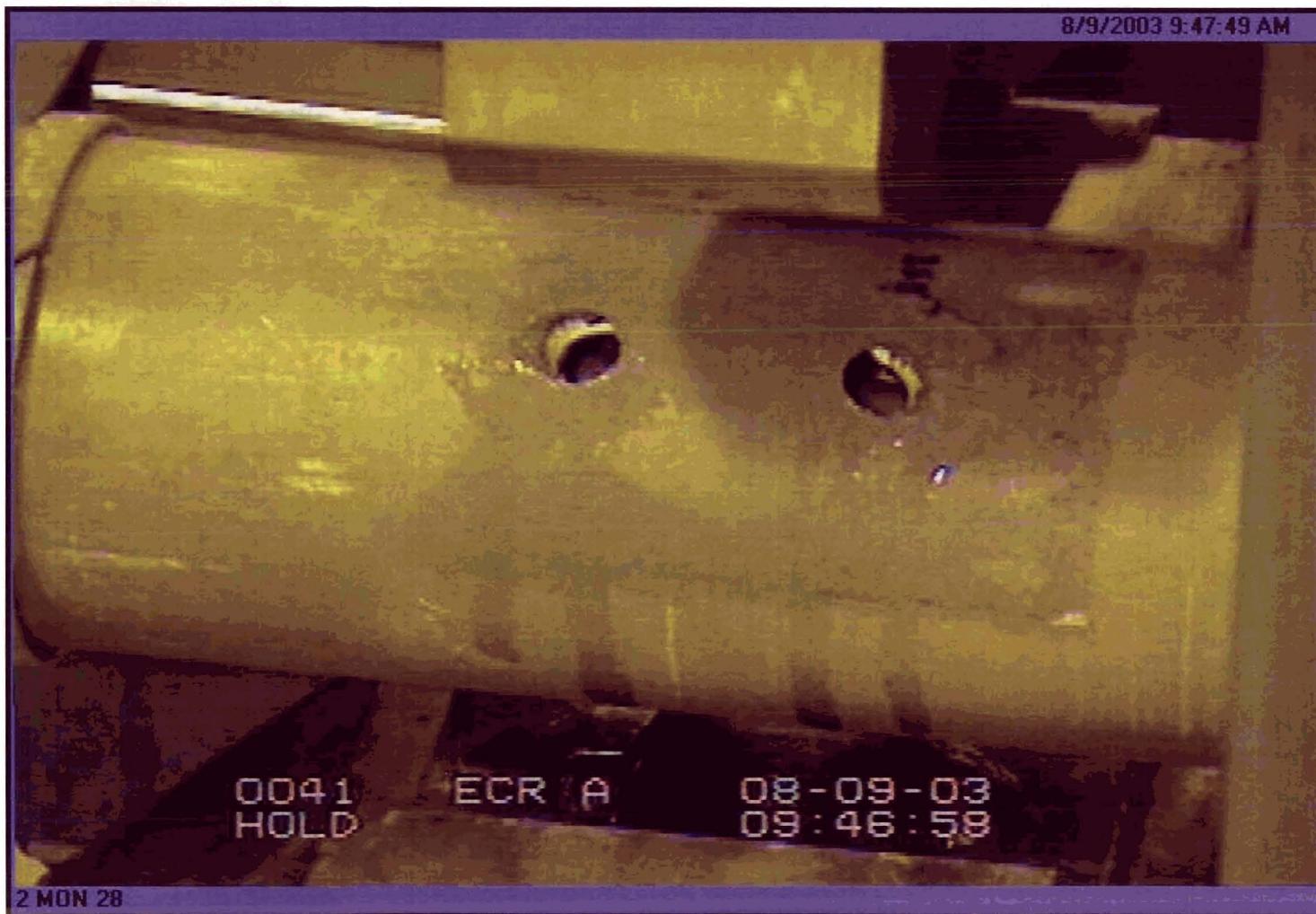
- **Westinghouse Wins Contract: Feb. 29, 1996**
- **Contract Value: \$770 Million**
- **Equipment Value: \$100 Million**
- **Alabama Issued Permit: June 19, 1997**
- **Notice to Proceed: June 20, 1997**
- **Construction Completed: June 8, 2001**
- **Agent Disposal Begins: August 9, 2003**
- **GB Munitions Destroyed: 22,246 Rockets***
- **GB Agent Destroyed: 222,358 Pounds***

*** As of April 5, 2004**

The first drained GB rocket – Aug. 9, 2003



The first drained GB rocket – Aug. 9, 2003



ANCDF ~ Anniston, AL



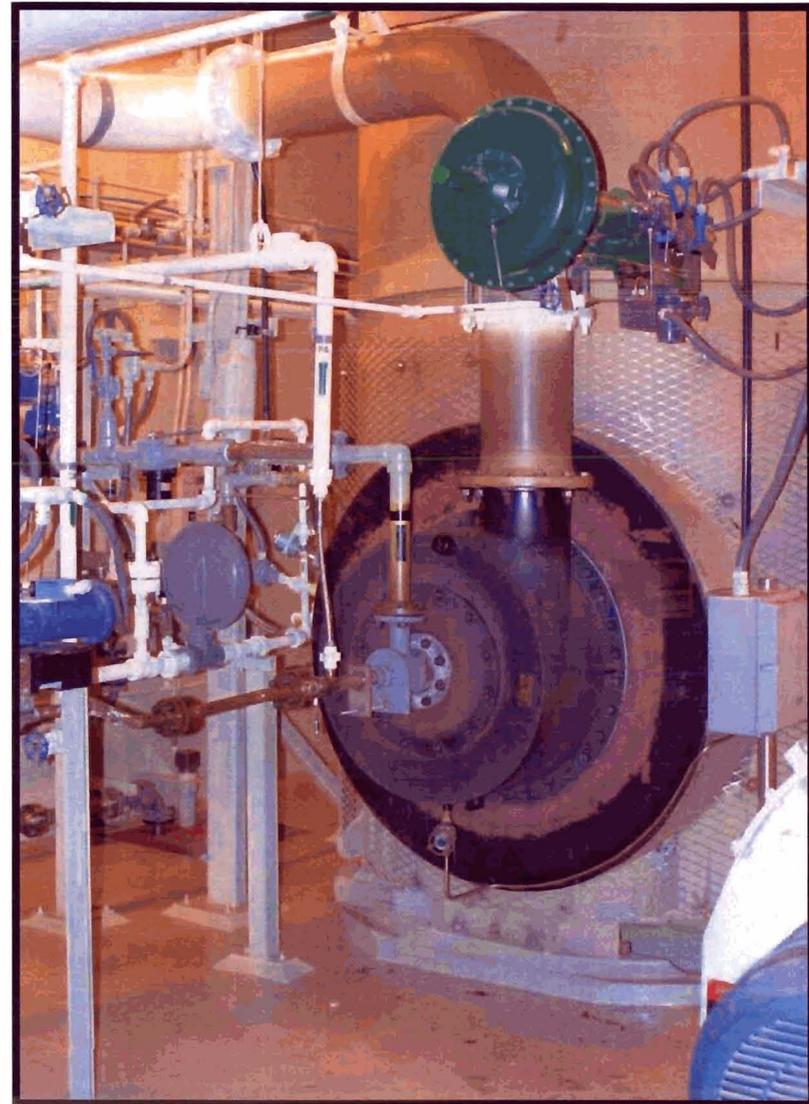
ANCDF Deactivation Furnace



ANCDF ~ Anniston, AL



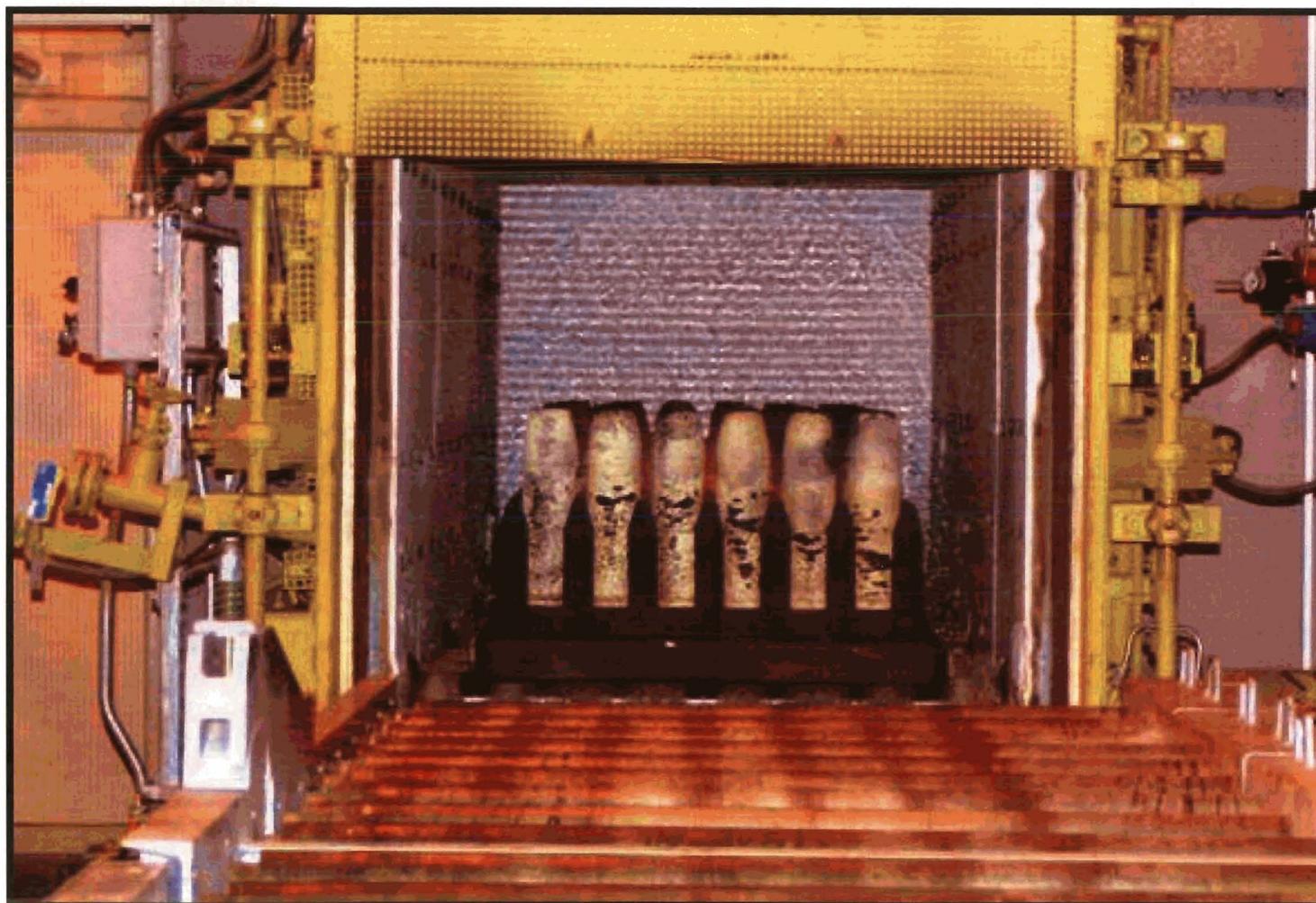
ANCDF Liquid Incinerator



ANCDF ~ Anniston, AL



ANCDF Metal Parts Furnace



ANCDF Demilitarization Protective Ensemble



The Core Values of ANCDF Operations

- **Personal Accountability:**
 - ✓ I am responsible for my actions.
 - ✓ My signature is my promise.
- **Procedural Compliance:**
 - ✓ I will comply with written procedures.
 - ✓ I will THINK about what I am doing.
- **Technical Inquisitiveness:**
 - ✓ I will know all that I can about my job.
 - ✓ I will investigate conditions that don't appear correct.
- **Willingness to Stop:**
 - ✓ Safety is my primary concern.
 - ✓ If I am unsure or if conditions are unsafe – I will stop.
 - ✓ If I observe others in unsafe conditions – I will stop them.

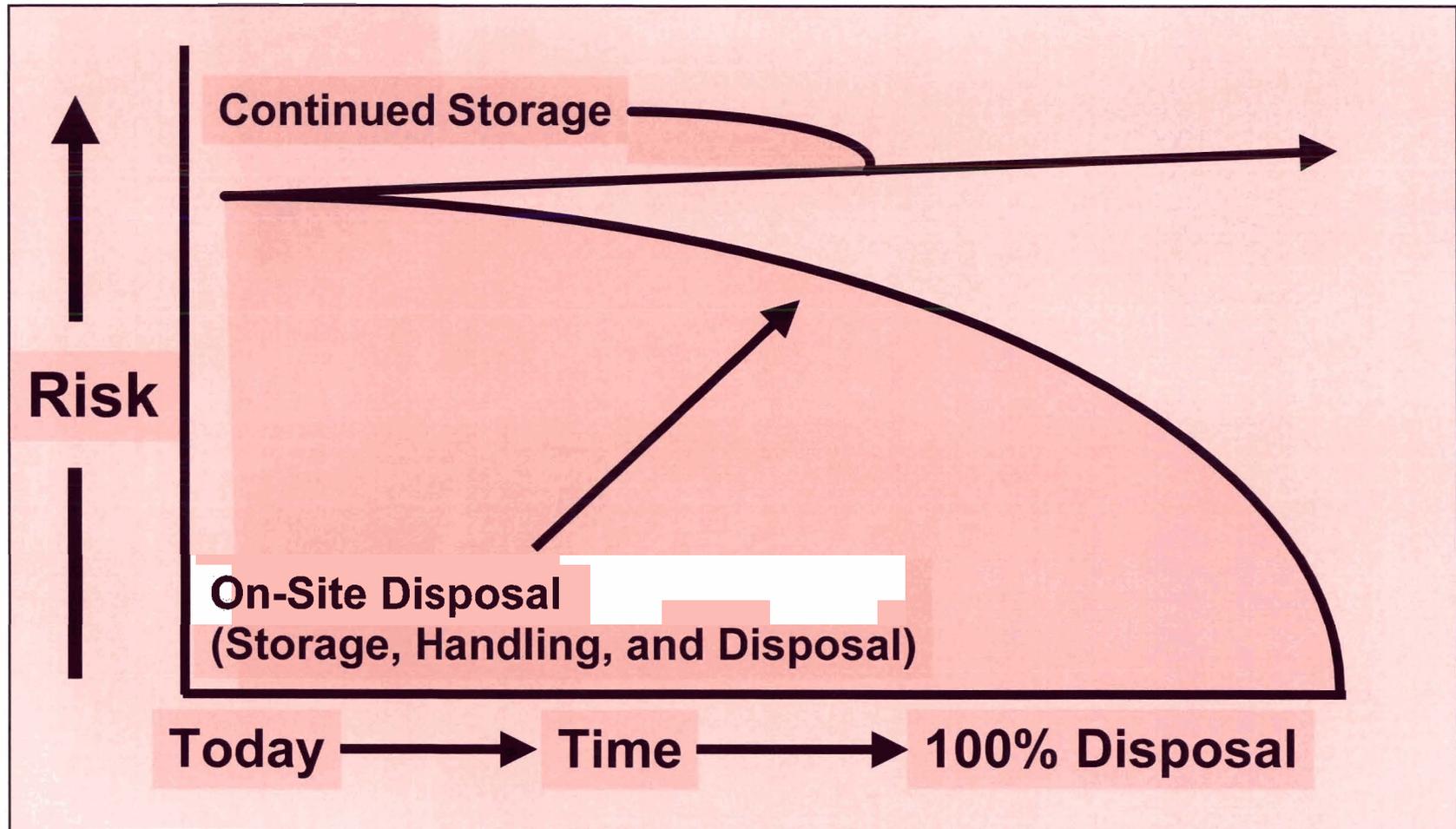
ANCDF Safety Culture

Disciplined, Safe Approach to Operations

- **Operations Readiness Reviews/Readiness Assessments**
 - Board and Managers develop detailed criteria
 - Managers complete affidavits and submit to board
 - Board evaluates and validates affidavits
 - Board assigns codes to punchlist items
 - Project Manager approves results

(Compliance with standards is minimal acceptance)

Comparative Risk: Storage vs. Disposal



Missile Recycling Center receives environmental award

**By Matthew Korade
Star Senior Writer
12-23-2003**

The Anniston Army Depot's Missile Recycling Center has received the Alabama Department of Environmental Management's pollution prevention award for 2003.

The award recognizes some of the best recycling and pollution prevention programs in the state.

The missile center, which strips down conventional, non-chemical rockets, received the award for its environmental record. The center recycles more than 98 percent of rocket materials, said Gavin Adams, of ADEM's office of education and outreach.

The military formerly burned detonated the missiles in open fields, a heavily polluting process. The missile center's process now captures emissions and recycles metals and propellants.

"This is a much better approach," Adams said.

Gordon Williamson, director of the Anniston Munitions Center, which runs the recycling center, said the award is good news for the depot and the community.

"Basically, there are no pollutants going into the air or into the ground using the processes at the Missile Recycling Center, that's the bottom line," Williamson said.

Williamson believes the award will help with the depot's image in the community and in Congress when the time comes to expand to larger missiles.

The award, which is chosen by a panel of ADEM and environmental officials, also is based on whether the technology can be transferred to other areas within the Department of Defense.

With the Missile Recycling Center, the first such operation of its kind in the nation, the technology can be used in other applications, Adams said.

Although the center is destroying TOW missiles now, it could be used in the future to dismantle Hawk and Patriots, he said.

Six award winners were selected from among about 25 applicants. Fellow award winners this year are Toyota Motor Manufacturing in Huntsville and Michelin Tire Corp., in Dothan.

A brief awards presentation will take place at the Alabama Environmental Management Commission meeting Tuesday at 1:30 p.m. at the ADEM headquarters in Montgomery.

ADEM Director James Warr and the commission chairman will present recipients with framed certificates.

A presentation at the depot in January or early February will recognize those who assisted in the accomplishment.

Depot's Missile Recycling Center is only one in nation

By Matthew Korade
Star Senior Writer
12-04-2003

BYNUM

Some of the workers look like milkmen. Dressed in white coveralls and black shoes, they tread carefully on wired rubber mats.

Everything at the Anniston Army Depot's Missile Recycling Center, from the workbenches to the floor, is grounded. If it weren't, static electricity could blow the place up.

Boxes of dismantled Javelins and Hellfires, crates of fins, cardboard drums of explosives sit in a corner, waiting for a future use. But the workers don't fear.

"I feel safer working out here with these people than I do driving to work every day," says Donald Duncan, who wears the nickname "ice man" on his jumpsuit.

It's a good name to have if you're working around explosives, he says.

The \$15 million center, which opened last December, is expected to recycle the 220,000 conventional missiles stored at the depot at a rate of about 15,000 missiles per year. It has been estimated that as many as 400 new jobs might be created as production increases.

The center, the depot's public affairs office says, provides a "total recycling solution" for missile disassembly, including propellant and warhead removal and explosives recovery. It is the nation's premier, and only, missile recycling facility.

About 98 percent of the missile hardware, warhead explosives and propellant ingredients can be reused or recycled for various industrial or military applications.

It's, in essence, a government chop shop. "It's a one-of-a-kind facility," said Nathan Hill, military affairs consultant for the Calhoun County Chamber of Commerce.

And, according to Larry Holcombe, the supervisor of the Missile Recycling Center, who watches the pressing process from a room full of monitors, it's all safe.

"When they say safety, we definitely make that our priority," Holcombe said.

Duncan leans over a workbench, pulling the fins off a tube that looks like a disemboweled telescope. For someone who worked on nuclear warheads for eight years, this is child's play.

The workers do a static electricity check on their shoes each day. But, just to be safe, they wear clothes that are conductive – even their underwear.



Depot's Missile Recycling Center is only one in nation - Continued

It is an unprecedented, environmentally superior and cost-effective way to dispose of obsolete tactical missiles, said depot officials.

Before now, the traditional destruction process was open burning and detonation.

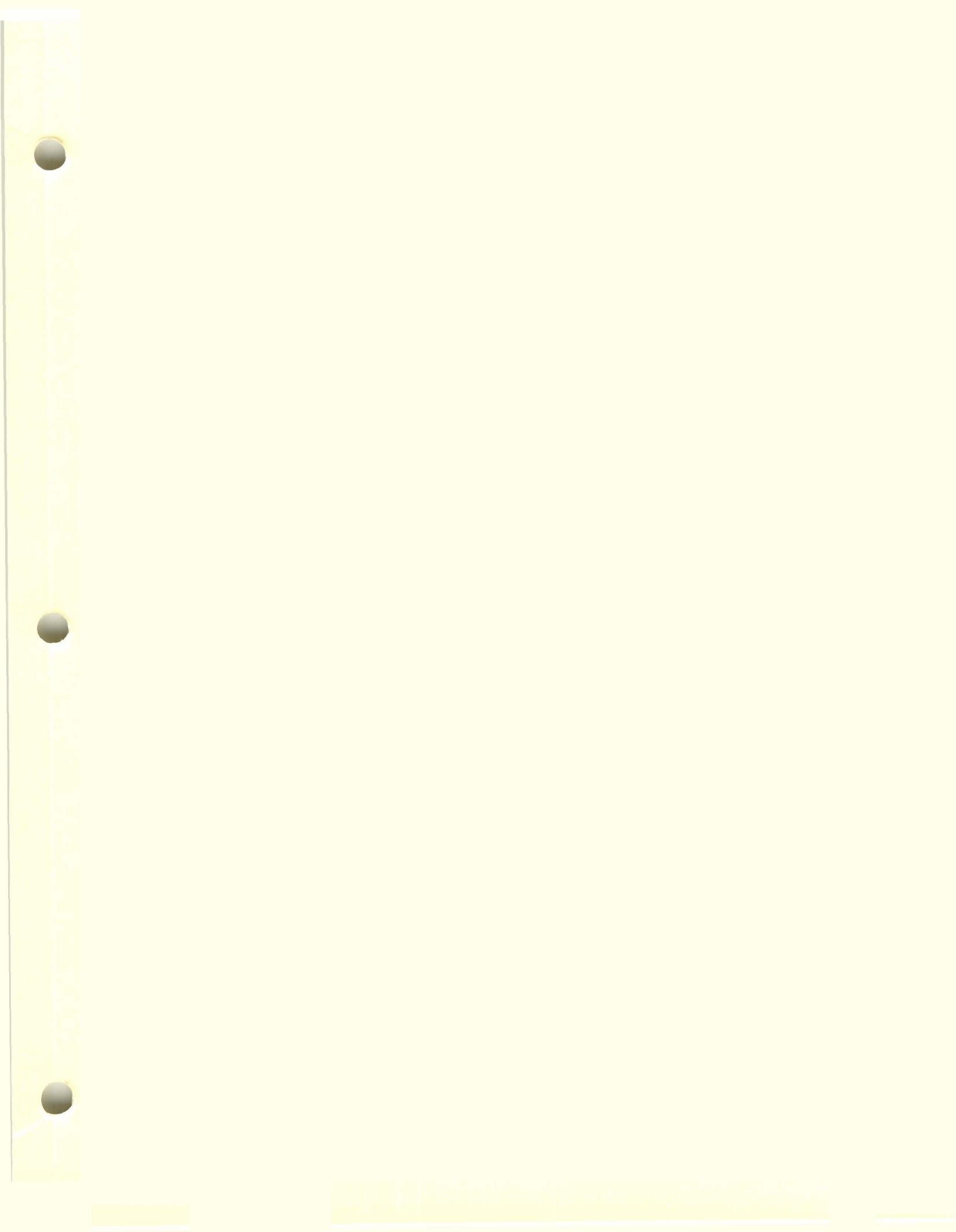
The workers tear down the missiles in a series of five isolated booths, separated from one another by thick concrete and cinder-block partitions. That way, if one missile ever does go off, the others won't go too.

They drain the propellant with a press designed to do to rockets what juicers do to oranges. The scrap is collected and sold to the highest bidder. Explosives are sold to demolition businesses.

Hill said the local congressional delegation got more money budgeted for the plant in fiscal 2004 to let it begin breaking down larger missiles, like Patriots. The success of the plant will help the depot survive the next round base realignment and closure, expected to begin in 2005, he said:

"We're the only place right now that the DOD has where they can recycle rockets, which should give us an edge when you're looking at other installations."





Defense Distribution Depot Anniston, Alabama (DDAA)

Mission: DDAA provides distribution services for tracked vehicles, wheeled vehicles, small arms, and missile launchers. Its primary mission is to support the maintenance mission of Anniston Army Depot. However, it also receives and sends equipment and machinery by land, sea, and air for worldwide distribution. The depot stores items ranging from small microchips to M1A2 main battle tanks. The depot's industrial capabilities include minor vehicle repair, modification and camouflage painting. Additional services include Total Package Fielding of weapons systems for combat and wheeled vehicles; disassembly, modification and minor repair of small arms weapons; and preservation and packaging of new procurement material. Personnel strength is 239 employees.

A. RECEIVING

DDAA operates three main receiving areas. All general supplies except small arms/weapons and vehicles/artillery are received in the Central Receiving location. Small arms/weapons are received in an approved secure facility and the vehicles and artillery are received in an appropriate receiving facility. Receipts include bin, medium bulk, bulk, individual items, parcel post, multi-pack items, and small, medium, and large lot sizes of materiel. All conditions of materiel are received, as well as sensitive, pilferable, classified, and various hazardous commodities.

General supplies are received in the Central Receiving area, which is located parallel to the installation's main gate. This area consists of 35,700 square feet of space utilized for receipt (kind, count, and condition). Materiel is processed through seven (7) receipt workstations, five (5) conveyor lines (pallet and tray) and a quality inspection station. Documentation is immediately generated to accompany materiel to its storage location or, if automatic disposal, a holding area. This area also contains returned materiel area for processing Army maintenance and on-post turn-ins. The coordination of the receipt input is made with the central receipt-processing site. Large lots of materiel do not enter the Central Receiving area but are carrier-spotted to the appropriate bulk warehouse.

Vehicles (track and wheeled), artillery, (towed and self propelled), trailers, bridging, and oversized item receipts are in-processed at DDAA's facilities on the East side of the depot. Basic issue items (BII) and certain components of end items (COEI) are removed and directed to the applicable storage or disassembly area. Receipts from off-post and on-post turn-ins of overhauled components (e.g., engines, transmissions) and large items weighing more than 2,000 pounds are processed in a building consisting of 25,000 square feet of work area configured to facilitate preservation, package, packaging, and marking (PPP&M).

The primary area used for the unloading of incoming small arms/weapons, receipt processing, initial serial number verifications, and staging pending movement to permanent storage locations is in an approved secure facility comprised of 40,000 square feet of space. Inbound cargo from all conveyances is unloaded via forklift. All containers are opened and small arms are placed on gravity-feed conveyor lines for serial number verification and inspection. The small arms are then manually packed for storage and moved to the storage locations.

B. PACKING

A wide range of preservation, packing, packaging and marking methods and techniques are available for materiel under 2,000 lbs, items over 2,000 lbs., vehicles (track and wheeled), artillery, (towed and self propelled), trailers, bridging and oversized. Some of the techniques used are state of the art paint/curing booths, stretch wrap for pallets, foam in place, cold seal, volatile corrosive inhibitor packaging, carton/crate/skid fabrication when commercial products are unavailable, a wide range of cleaning methods and P-type preservatives. In addition, DDAA operates specialized functions such as kit/BII assemblies for various customers, specialized Missile Command tool set assemblies, and packing of Army maintenance overhauled items (both major end items and components of end items).

All small arms/weapons parts requiring preservation, packing, packaging and marking are delivered to an approved secure facility. The area, along with small arms receiving, occupies 40,000 square feet of space and is equipped with 2 packing lines. One line is designated for foam in place type operations; the other line is equipped with a cold seal machine and is used for packaging of pistols, rifles and small arms parts. All movement of materiel is accomplished by forklift.

C. SHIPPING

The warehouse functions receive Materiel Release Orders (MROs) for stock selection within the respective bin, medium bulk and bulk warehouse areas. Stock selection occurs and the materiel is subsequently forwarded to the appropriate shipment processing area. The main shipment area normally processes items less than 2,000 lbs. Separate buildings have been identified to process and ship items over 2,000 lbs, and vehicles (track and wheeled), artillery, (towed and self propelled), trailers, and bridging and oversized items.

The small arms/weapons and classified shipping area is located in an approved secure facility and occupies approximately 10,000 square feet of space. All off-installation issues are processed from this location, where they are sorted into shipment sizes. Two packing stations pack Parcel Post materiel, which is then processed through a Pitney Bowes mailing machine. Outgoing mail is processed and picked up daily. Large shipments are packaged in the freight area and are staged pending pickup by commercial carriers.

D. TRANSPORTATION

Commercial carriers servicing DDAA have terminals in Anniston, Birmingham and Atlanta. DDAA uses a wide variety of transportation methods, including small parcel, less-than-truckload, truckload, dromedaries, flat beds, drop decks, specialized equipment such as the removable gooseneck trailers and satellite monitoring equipped vehicles, and boxcars, flat cars, and DoDX cars. DDAA's carriers include Federal Express, Eagle Global Logistics, Landstar Ranger, FedEx Custom Critical, Boyle Transportation, Trism Specialized Transportation, and Norfolk Southern Railway. In addition to utilizing the Defense Transportation System of air and ocean terminals, DDAA also makes OCONUS shipments direct to overseas customers via Federal Express, DHL Worldwide and other global carriers.

Based on the priority of the Materiel Release Order, the characteristics of the materiel to be shipped and the customer destination, DDAA selects the most efficient mode of transportation in order to meet the customer's requirement.

DDAA outloads materiel from several motor shipment terminals, each strategically placed throughout the center to minimize handling and increase efficiency. DDAA has rail capability for all commodities and internal rail movement is provided through an interservice support agreement with the host. Commercial rail service is provided by Norfolk Southern Railway through an interchange agreement.

E. OTHER SYSTEMS

A general supply building (excluding small arms, weapons/artillery and classified) is organized as a total processing area. It has a central receiving section, which can receive all types commercial, military, and other type vehicles that contain general cargo to include hazardous materials; a section for preservation, PPP&M; two storage sections containing two automated storage carousels; and a bin and medium pallet rack storage with narrow-aisle type storage. The general supply building contains areas for storage of fast moving materiel and a shipping section where materiel is centrally staged for the majority of off-post and on-post issues.

The small arms/weapons facility is a total processing facility for the receipt, PPP&M, storage (bin, medium, bulk) and shipping of all small arms/weapons, their parts, and classified materiel.