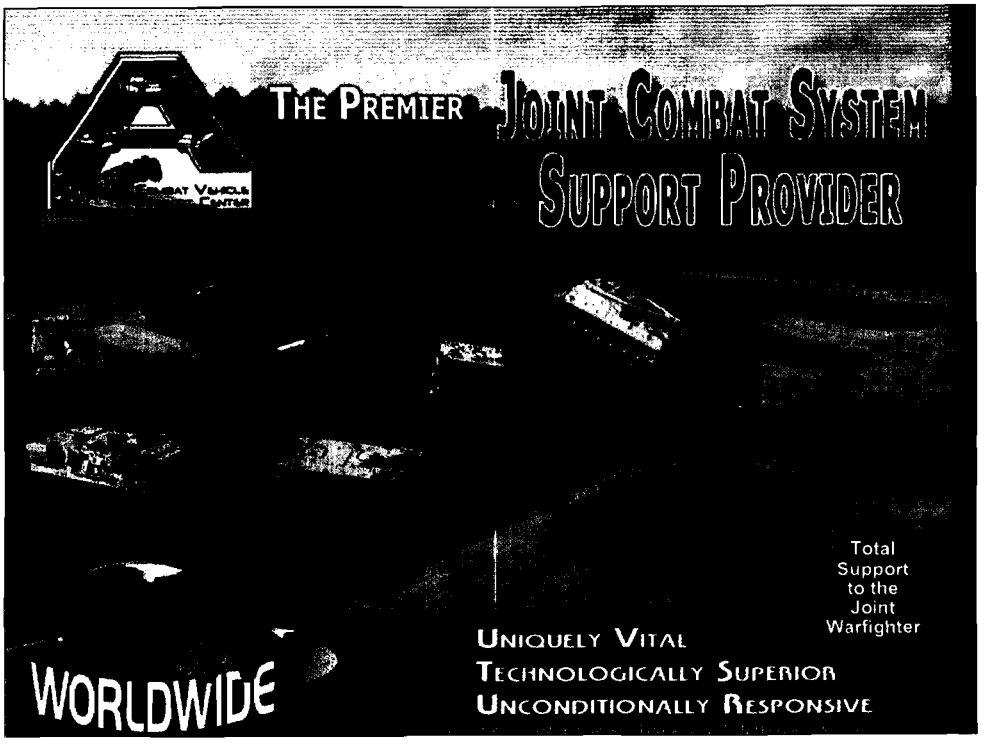
Joint Work

Table of Contents

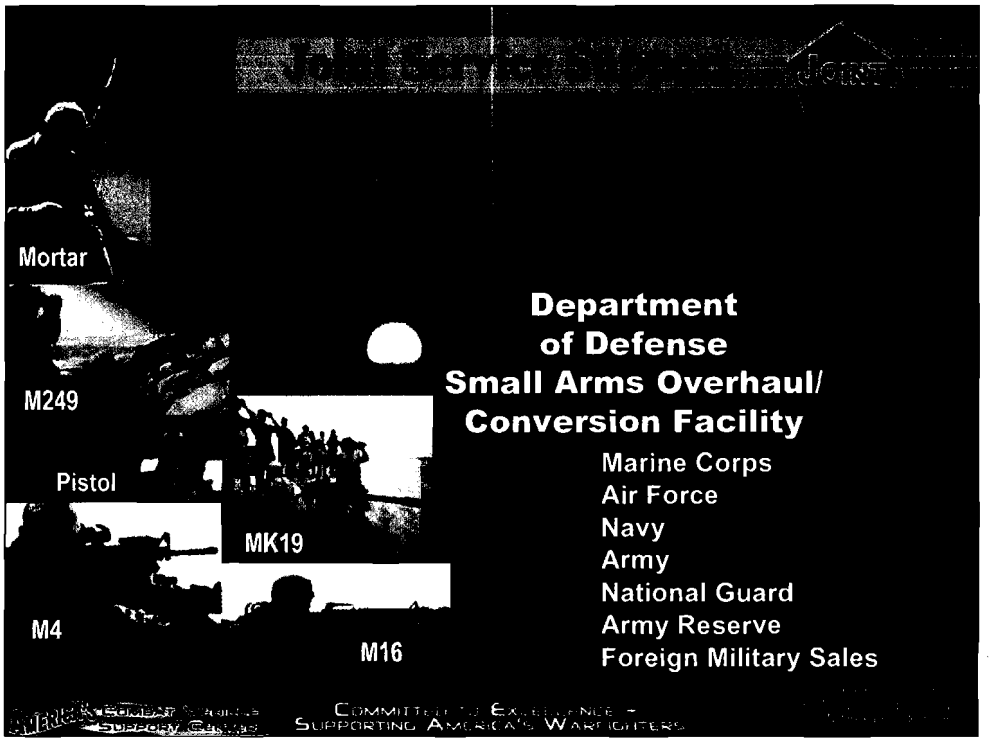
Research and Development Efforts

Defense Non-Tactical Generator and Rail Equipment Center (DGRC)



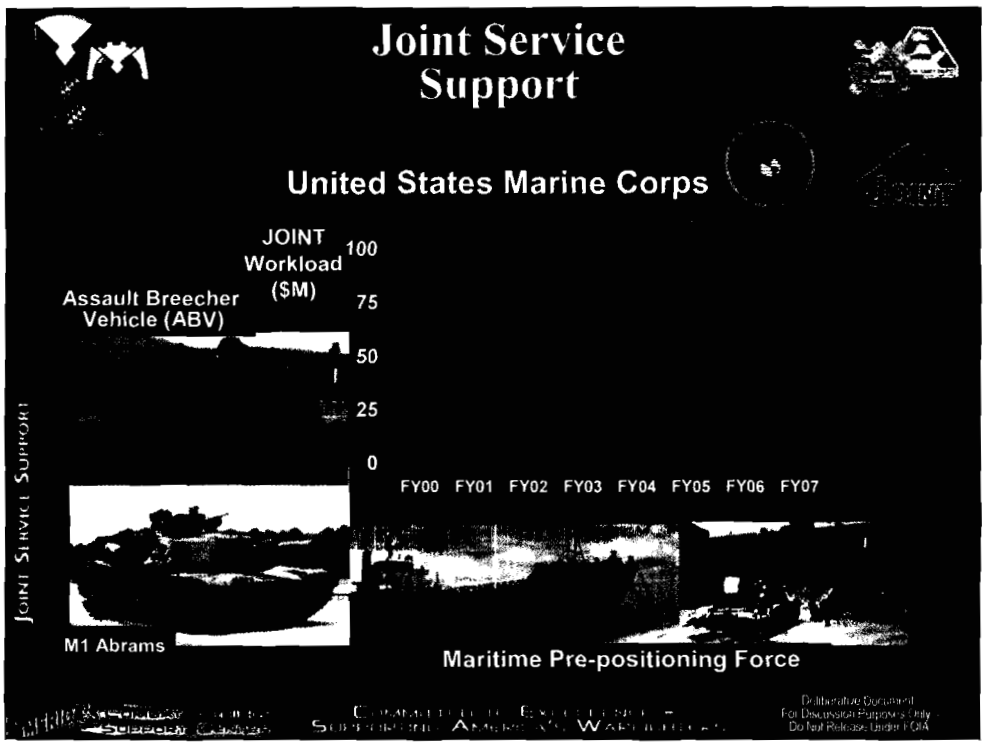
As stated earlier, our Future Focus is to be the Premier Joint Combat System Support Provider Worldwide.

Pictured here are many of the weapon systems that we support. As you will see later, Anniston already supports all combat vehicles in the DOD arsenal. The only current exceptions are the Army's Bradley Fighting Vehicle System, Multiple Launched Rocket System, and the Marine Corps' Amphibious Assault Family of Vehicles.



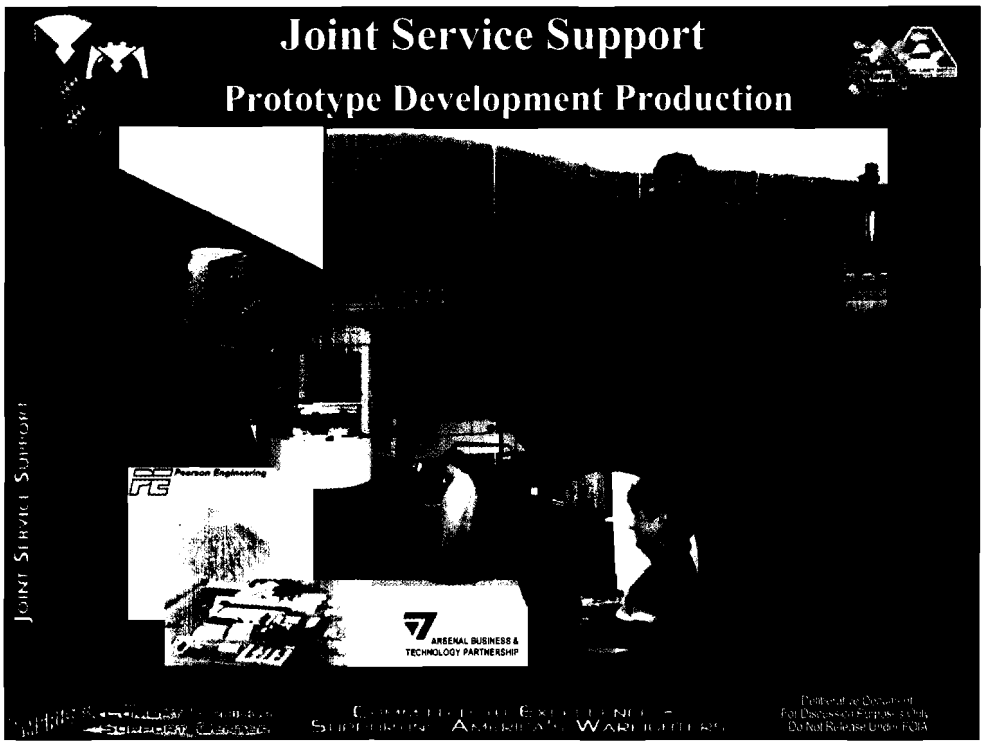
Our Department of Defense Small Arms Maintenance Facility is used to rebuild and provide small arms to the Marine Corps, Air Force, Navy, Army, and Reserve Components, as well as our Worldwide Allies.

Within a maintenance facility normally work loaded at a fraction of maximum capacity, a wide range of small arms can be overhauled to new condition and tested indoors using modern computer controlled targeting equipment.



Anniston is currently overhauling Marine Corp M1 tanks and meeting the demanding shipping schedules required by the Maritime Pre-positioning Force.

Starting with a test quantity, Anniston proved its ability to produce a quality product within cost and on schedule, which has led to an annual Marine Corp production requirement of 69 tanks per year.



Another joint effort accomplished at Anniston is the prototype development of Combat Vehicles. Anniston has developed many prototype vehicles and continues to work with all services to design and develop new and future combat vehicles.

One such recent development was designing and prototyping the Marine Corp Assault Breacher Vehicle.....which is a remote controlled mine plow on an M1 chassis.

Integrating the efforts of Benet Labs, and the industry partners responsible for the mine plow and remote control systems, Anniston has completed prototype testing and begun low rate production. Last month after testing of the prototype at Aberdeen Proving Ground, we received an email from the Marine Corps Command that stated "Your hard work and dedication paid off with stunning success and proved the Benet design and Anniston Army Depot fabrication to be of superior quality".

Discussions with our Marine Corps customers have indicated that our support may be soon expanding to other combat vehicles as well.

CLASS 70 BRIDGE CONVERSION

A partnership program between ANAD, TACOM, and Belvoir Labs

Objective:

1. Develop a program to convert class 60 bridges to class 70 or 70 ton capacity bridges for the new M1A1 vehicle.

2. Provide testing of alternate method of bridge construction/repair with the use of "Huck" type fasteners rather than hot rivets.

Requirements:

1. Fabricate initial production bridges to be used for testing and at the same time identify TDP errors and discrepancies.

2. Fabricate production bridges and spare components using "Huck" fasteners.

Results:

1. Test bridges fabricated and tested with satisfactory results.

2. TDP discrepancies documented and reported to Belvoir/TACOM.

3. Production completed.

LONG WALL MINING PAN PRODUCTION

A Joint Production Program of Commercial Coal Mining Equipment Between ANAD and United Defense Commercial Products

Objective:

A program designed to measure the performance of a military industrial operations facility when used to apply its resources toward producing commercial products during times of low military activity.

Requirements:

1. Weld assembles per customer TDP commercial long wall mining conveyor components.

2. Some parts of the welded assembly require machining and paint is required after assembly.

3. Fixturing is required to hold tight assembly tolerance required for the conveyor components to work in unison at the coal mine.

4. Some of the welded components were prehardened requiring special machining techniques and welding methods.

Results:

Assembles produced on schedule and exceeded quality requirements.

M1 PANTHER

M1 Chassis with "hull cap" that provides a commanders station

Objective:

Develop an M1 chassis modification which when applied would provide an M1 chassis with commanders station, communication equipment, and a weapon mount.

Requirements:

1. Overhaul M1 chassis, apply modifications to support a commanders station complete with weapon mount.

2. Design and fabricate floor system and hull cap or cover to support commanders weapon system.

3. Install M1A2 series armor junction box and harness to support operation of current fielded counter mine roller and plow.

Results:

6 Proof of principle vehicles have been produced, some have been fielded with counter mine rollers and remote control capability. At least one vehicle has remained at Aberdeen Proving Ground for test and evaluation.

M551 SUSPENSION TEST BED

A vehicle modified to be used to perform suspension test

Objective:

Provide a highly modified chassis for suspension testing.

Requirements:

1. Overhaul M551 chassis and perform modifications to allow suspension testing.

2. Install power pack with increased horse power for high speed testing of suspension.

Results:

The vehicle was fielded results of the test have been documented.

M551 SHERIDAN TURRET DRIVE IMPROVEMET

A partnership program between ANAD, Bene't Labs, and General Electric

Objective:

Provide the National Training Center (NTC), Ft. Erwin, CA, opposing forces, with a reliable improvement to the existing standard M551 electronic turret drive system. The existing turret drive system is difficult to maintain and not supported with replacement parts.

Requirements:

1. Overhaul M551 chassis and configure to latest TDP requirements for use at The National Training Center, Ft. Erin CA.

2. Modify, assemble and test turret to prototype turret design developed by Bene't Labs and General Electric, (Now General Dynamics). The finished vehicle will incorporates a tank thermal sight, and a M2 Bradley electronic turret drive system.

3. Perform initial testing, data gathering, and adjustment on the turret stand and on the test track.

4. Field the vehicle and monitor performance over a three-year period.

Results:

The vehicle exceeded the expectations of the opposing force troupes and performed almost entirely trouble free for three years while in operation.

M58 SMOKE TURBINE ENCLOSURE IMPROVEMENT

A proposed product improvement by ANAD Production Engineering

Objective:

Improve process flow for the conversion of M113 A2 chassis to the M58 vehicle by providing optional fabrication and installation of the turbine engine enclosure.

Requirements:

1. Current TDP requires machining of openings in the M113 A2 chassis at specific close tolerance locations. The turbine enclosure is then fabricated by attachment of special fixtures to these machined surfaces and building the enclosure piece by piece inside the hull.

2. A prototype turbine enclosure was designed, fabricated, and installed which would allow the unitized construction on the turbine enclosure before installation in the hull. The openings in the hull would then be located from the turbine enclosure insuring proper function without having to pre machine the vehicle hull.

3. A worthy production cycle timesaving would be realized with this construction method.

Results:

1. Rough draft drawings were made and a prototype box has been fabricated.

2. A scrap hull was modified with the new concept turbine enclosure.

3. TACOM and PM Smoke have been invited to come review the installation and provide comments before an ECP is initiated.

4. Proposed changes were adopted by PM Smoke.

OSV (Opposing Forces Surrogate Vehicle)

A partnership program with STRICOM (Simulation Training and Instrumentation Command), United Defense Land Products, Bene't Labs, and Rock Island Arsenal

Objective:

Provide the National Training Center (NTC), Ft. Erwin, CA, opposing forces with a reliable training vehicle which emulates the profile and performance of a Soviet BMP II.

Requirements:

1. Produce BMP II replica hull from M901 excess assets and the use of draft STRICOM TDP.

2. Mark up rough draft TDP and provide input to STRICOM necessary to finalize TDP.

3. Prototype components and assemblies, provide prototype sketches for improvement to the existing system configuration.

4. Assemble, and test turret from components fabricated at Rock Island Arsenal, purchased M2 Bradley components, and excess M60 sight systems.

5. Assemble completed vehicle, test and deliver to NTC.

Results:

1. Initial fielding completed with 10 vehicles.

2. TDP still in developmental stage.

3. Minor improvements being developed biased on initial fielding.

M60 AVLB IMPROMENT "RAZORBACK" PROGRAM

A partnership program involving TARDEC, Allison Transmission, Nimda, General Dynamics, Teledyne Vehicle Systems, and ANAD

Objective:

Develop and field a prototype M60 AVLB test bed for demonstration of improved powerpack, chassis and hydraulic systems.

Requirements:

1. Disassemble, overhaul, and modify M60 AVLB chassis in accordance with prototype TDP.

2. Reassemble with new prototype powerpack, suspension, and hydraulic system.

3. Improvements include 1200 HP engine, X1100 transmission, Hydropneumatic suspension, and variable displacement hydraulic pump.

4. Provide system support during first year at performance demonstrations.

Results:

Vehicle was produced as required, performed above expectations and has been demonstrated on several occasions.

SCN-93-601-15

A partnership program between ANAD and Bene't Labs

Objective:

Demonstrate the ability to upgrade the M1A1 turret by installation of the XM291 gun system.

Requirements:

1. Disassemble and modify M1A1 turret with preliminary drawings to accept XM291 gun system.

2. For the most part is modification involved removal of the original gun trunnions and fabrication and installation of the prototype components.

3. Assemble and test the turret.

Results:

Turret modified, assembled, program currently on hold.

SOVIET SIMULATOR VEHICLE

A partnership program between ANAD, STRCOM (Simulation Training and Instrumentation Command), and Georgia Tech University

Objective:

1. Field two Soviet type anti-aircraft vehicles which physically resemble and perform like actual Soviet made anti-aircraft vehicles.

2. These vehicles will be used in the evaluation of a millimeter wave radar system requiring them to reflect the proper radar signature and emit tracking signals.

Requirements:

1. Fabricate two turret structures from aluminum. Ship the turrets to Georgia Tech where technicians will install turret drives and radar equipment.

2. Disassemble and modify XM247 Sargent York chassis to accept vismods which will make the chassis appear like a Soviet Chassis.

3. Fabricate and install vismod on XM247 chassis and deliver to Georgia Tech.

Results:

1. Turret structures fabricated and delivered as required.

2. Chassis vismod modification fell behind schedule due to conflicts with other production at ANAD. STRICOM eventually procured Soviet type chassis and turrets were installed, tested, and fielded as required.

SOVIET TARGET VEHICLE

A partnership program between ANAD and STRICON (Simulation Training and Instrumentation Command)

Objective:

Fabricate and field two target vehicles for test evaluation of Maverick missiles which use the millimeter wave guidance system.

Requirements:

1. From a photograph develop a facade constructed of steel plate components proportionally scaled to fit on an M60 chassis.

2. Develop drive system for fake acquisition radar to allow it to rotate at a speed similar to the actual simulated vehicle.

3. Provide plan for disassembly and re-assembly of façade to facilitate transportation on highways.

Results:

1. Vehicles fabricated on schedule as required and delivered to test sight where ANAD engineer supervised assembly and operation.

2. Radar drive system fabricated from code F turret drive components which saved program funds.

SURVEILLANCE PROTYPES

A partnership program with SRICOM

Objective:

Fabricate and field track vehicle with surveillance radar equipment.

Requirements:

1. By using preliminary sketches extensively modify Marine Corp. LPT7 vehicles to accommodate missile surveillance equipment. The modifications to the aluminum hulls of the vehicles included increasing the lengthening of the hull and radical changes to the roof configuration.

2. Add leveling equipment to accommodate proper operation of radar.

Results:

Vehicles completed as required.

THUMPER

A partnership program with Bene't Labs

Objective:

Fabricate a test bed vehicle which utilizes an M1 A2 chassis and a prototype turret which will allow testing and demonstration of the XM 291 gun system, autoloader and M1 A2 fire control.

Requirements:

1. Fabricate turret by preliminary TDP developed by Bene't Labs. Install XM291 gun system and prototype autoloader system. Assemble turret using M1 A2 turret fire control components. Mark up preliminary TDP during assembly.

2. Test turret on turret stand and install on M1 A2 chassis.

3. Deliver vehicle to Aberdeen Proving Grounds for additional testing and feasibility demonstrations.

Results:

Vehicle completed, test at Aberdeen document successful performance.

Date: 6 April 2004

Subject: Assault Breacher Program (ABV)

The Assault Breacher Program is designed to provide the USMC a vehicle capable of breaching and providing a clear lane through enemy mine fields, the vehicle must be light enough to be transported from ship to shore by amphibious transport vessel. Under the current direction of this program, the ABV platform will be based on the legacy M1 vehicle chassis with a mounted full width mine plow and a fabricated turret, which will replace the traditional turret. The turret will contain the vehicle commander with controls for operation of a lane marking system and a linear demolition charge in addition to the standard M1 commanders weapon station. The chassis will contain the driver in the traditional location of the M1, the driver will have additional controls for operation of a mine plow. The requirement for breaching became apparent in Operation Desert Storm when the USMC had to call on the British to breach mine fields before they could begin to carry out their mission. Since that time there has been attempts made to fulfill this role by defense contractors. The most recent was the United Defense "Grizzly". The ABV program has provided a concept vehicle which assembled at ANAD and shipped to Aberdeen Test Center, December 2002. This vehicle was subjected to various breaching type testing at ATC and other locations. Three additional vehicles have been produced and shipped March 2004 to ATC. These vehicles have refinements which are a result of testing done on the first vehicle. The test plan for the three vehicles is to further refine the vehicle configuration based on limited user operation. The production vehicles will reflect changes defined by the user interface. Anniston Army Depot's role in this program will be that of R&D engineering, provided by Process Engineering, DP, teamed with TARDEC, Benet' Labs, under the direction of USMC, TACOM and Pearson Engineering. ANAD will be heavily involved in fabrication, overhaul, assembly, and testing during the prototype phases of this program. Production is planned to be performed at ANAD in the future.

Memorandum For Tank Automotive Command Engineering March 21, 2000
PM 70 Bridge Office Attn: Greg Updike, DSN 786-7397

Subject: Bridge Hardware

During conversion of 60/70 ton bridges it has been reported by mechanics that some of the pin rivet fasteners are "popping" before the proper tension is achieved and the collar is properly swaged in place. Indications are that other vendors are manufacturing pin rivets that may not meet the requirements necessary to perform properly with the hydraulic Huck installation tools.

Currently mechanics visually inspect the installation of the pin rivet fasteners to assure proper installation.

Pin rivets that have to be removed because of improper installation must be destroyed to be removed. The cost of the failed pin rivets, collars, and the time to remove the failed fastener effects the overall cost of executing the program depending upon the frequency of failure.

Request that sample pin rivet testing plan be developed jointly between the ANAD materials lab and TACOM engineering. This plan would be used to assure conformance to the Huck pin rivet installation system requirements. These requirements should be used since Huck equipment is used for installation. Cost of testing would depending on the frequency and detail of test performed. These issues need to be determined jointly by TACOM and ANAD engineering.

Thank You,

Brian Anderson
Process Engineer

Mine Countermeasures:... through the Beach and Beyond

DISCUSSION

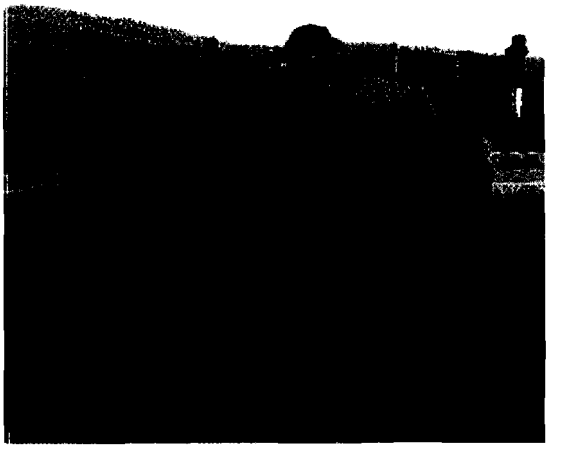
Once ashore, naval expeditionary forces must be capable of detecting, breaching, clearing, proofing, and marking mines and obstacles, as well as disseminating mine data. The Marine Corps' current inventory of MCM systems includes the AN/PSS-12 Mine Detector (a metal detector) and explosive breaching systems (consisting of Assault Amphibian Vehicles equipped with Mk154 Triple-Shot Line Charges, Mk155 Line Charges, and Anti-Personnel Obstacle Breaching System). The inventory also contains mechanical breaching, clearing, and proofing systems, specifically the M1 tank with Track-Width Mine Plow and the Armored D-7 Dozer. Overall, these systems do not meet the detection, speed, and responsiveness requirements of the modern battlefield.

Three acquisition programs promise to significantly improve Marine Corps MCM capabilities:

The **Advanced Mine Detector (AMD)** will combine multiple sensing technologies to detect explosives in anti-personnel and anti-tank mines, a key capability due to the worldwide proliferation of low- and non-metallic mines. Initial operational capability is scheduled for FY 2008 and full operational capability for FY 2009.

The **Coastal Battlefield Reconnaissance and Analysis (COBRA) System** is a remote, multi-spectral minefield sensor that may be flown on manned or unmanned aviation platforms. Initially, COBRA will offer standoff detection of surface minefields and obstacles and provide beach and inland area intelligence data. After subsequent development, COBRA will be enhanced to detect mines and obstacles in the surf zone and beyond the beach as well.

The **Assault Breacher Vehicle (ABV)** will be a single-platform, minefield breaching, clearing, proofing, and marking system that possesses the same speed and mobility as modern mechanized forces. Combining two Mk155 Line Charges, a Full-Width Mine Plow, and a breached lane marking system on an M1 tank chassis, the ABV will offer deliberate and in-stride breaching capabilities. Initial operational capability is scheduled for FY 2006 and full operational capability for FY 2007.



MARINE CORPS POSITION

Current Marine Corps MCM systems do not provide naval expeditionary force commanders with adequate capability to achieve and maintain momentum in a full-spectrum anti-access environment. The Marine Corps will shortly implement a MCM Master Plan designed to fix mine countermeasure deficiencies in the Marine Corps.

A quality called 'jointness' could be a plus for Anniston Army Depot

By Matthew Korade
Star Senior Writer
01-25-2004

It's called "jointness," a word for the amount of work a military installation does for other branches of service.

The more "jointness" the better, as far as the Department of Defense is concerned. It is what Secretary of Defense Donald Rumsfeld wants for his new military — a high amount of cross-training and efficiency.

"Jointness" will spell life or death for the nation's bases in the upcoming round of base closings, according to recently released criteria.

How much jointness does the Anniston Army Depot have?

Quite a bit, local officials say.

"The bottom line is, we're hoping that our joint operations that we have in different services will be a plus for us in this base realignment," said Nathan Hill, military liaison for the Calhoun County Chamber of Commerce.

The depot refurbishes tanks and cannons for the Marines and National Guard. It rebuilds small arms for the Navy and Air Force. Troop transports, bridge launchers — the depot can do it all and more.

It can even take an old tank and turn it into a remote-controlled mine plow. The Marine Corps prototype is going to Aberdeen Proving Ground, Md.

Since October, The Anniston Army Depot has performed $70 million in work for the Guard and other services, and in fiscal 2003 it churned out $83 million worth. Before then, it was running in the $30-$40 million range, according to depot officials.

Much of the increase has to do with Marine Corps tanks coming back from Iraq, said Paul Harper, the depot's general manager for operations. Before the war, the number of tanks they were fixing stood in the teens. Afterward, it hit 100 and climbing. The depot did 70 in the last three months alone.

The order for more was based on the quality of the work, Harper said.

All of this is expected to help the depot when it comes time to cut bases in 2005. The Department of Defense is planning to make the largest number of base closings since World War II.

A quality called 'jointness' could be a plus for Anniston Army Depot - Continued

Once gainfully employed, many of the Pentagon's Cold War bases are of little use now. So they're rolling the tanks and aircraft through the doors one last time. In BRAC 2005, the DOD will slice away a quarter of its infrastructure.

Closings and realignments have taken place four times since 1988. One ended in the loss of Fort McClellan. But not all of those rounds were bad for Calhoun County. Some meant the depot got more work. Now, whenever men in safety glasses test-shoot Air Force pistols or Guard rifles, or women in blue jumpsuits rebuild Marine Corps howitzers, or workers dismantle missiles for recycling, "jointness" is at work.

The depot manages the former rail shop at Hill Air Force Base, Utah. Now called the Defense Non-Tactical Generator and Rail Equipment Center, it is the only facility of its kind in the Department of Defense, the only place that does all levels of locomotive and rail maintenance, the only place that overhauls electric generators.

In this sense, it is similar to the work done by the depot's small arms shop, which is the only facility in the DOD to overhaul hand-held weaponry. That is right here in Anniston.

Installations other than the depot also do joint activity, but many don't do as much, Hill said.

A former deputy commander of the depot for 15 years until retiring in 1999, Hill said he did what the current deputy commander is doing — giving the services that little extra quality measure that keeps them coming back. It has worked.

"Customer service has been the No. 1 priority for everything the depot works on," Hill said.

Joint operations will be key point in upcoming base cuts

By Matthew Korade
Star Senior Writer
02-03-2004

One criteria the Department of Defense will use in making recommendations for base cuts in 2005 is an installation's joint operations.

With regard to this one issue, the Anniston Army Depot's contribution to the National Guard Training Center is tremendous, said Col. David McPherson, the training center's manager.

The depot assists the federal employees assigned to the training center with legal and Equal Employment Opportunity services, worker's compensation and quality-of-life improvements.

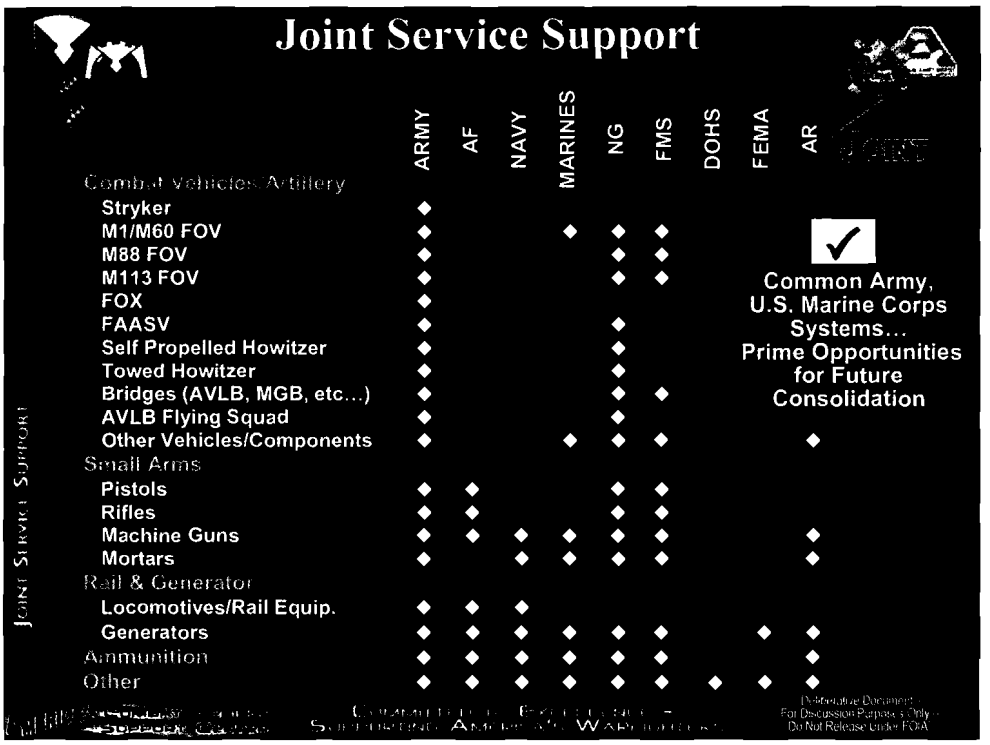
The depot also helps with ammunition supply on Pelham Range, including the provision of three-igloos for ammunition storage, Guard officials said.

Its ordnance engineers also respond when unexploded shells are discovered on Pelham. In addition, it provides the Guard and other agencies with a means of disposing of hazardous materials.

In past years, the Guard and reserves have benefited from the depot's missions. Ammunition and maintenance units would often stay at the training center's garrisons while attending annual training at the depot, center officials said.

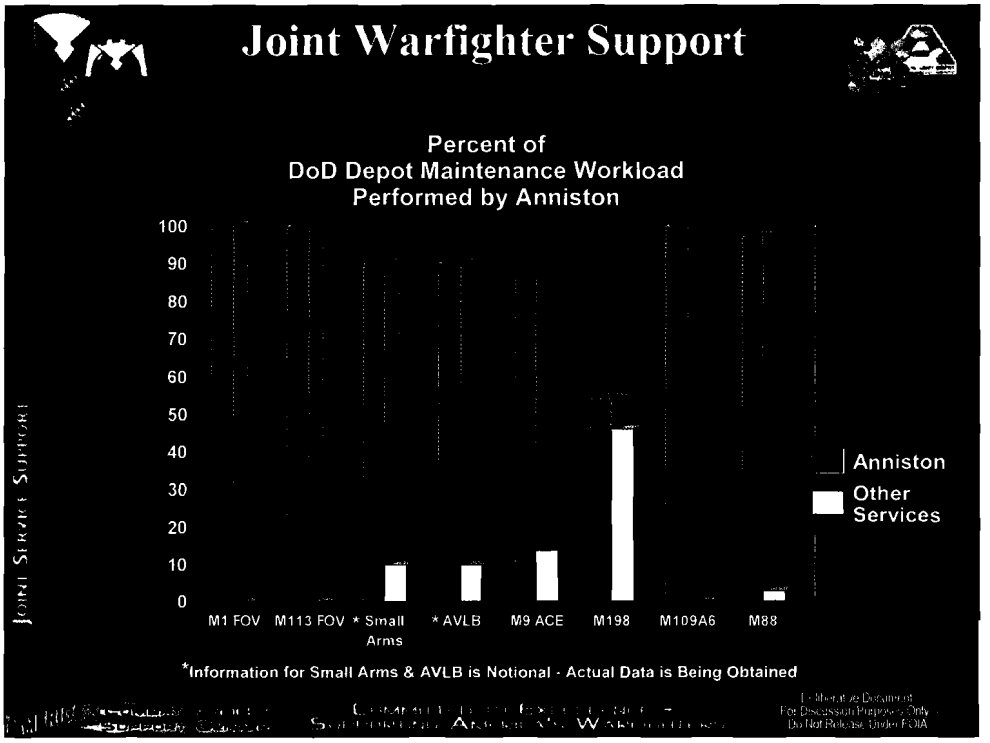
Since Sept. 11, 2001, the depot has provided services to Guard and Reserve members and their families through its Army Community Service Center. The center assists military members and their families with preparations for deployment, financial education and employment for family members.

In short, officials said, the depot and National Guard Training Center not only share a common border on Pelham Range, but also share common interests in supporting each other.



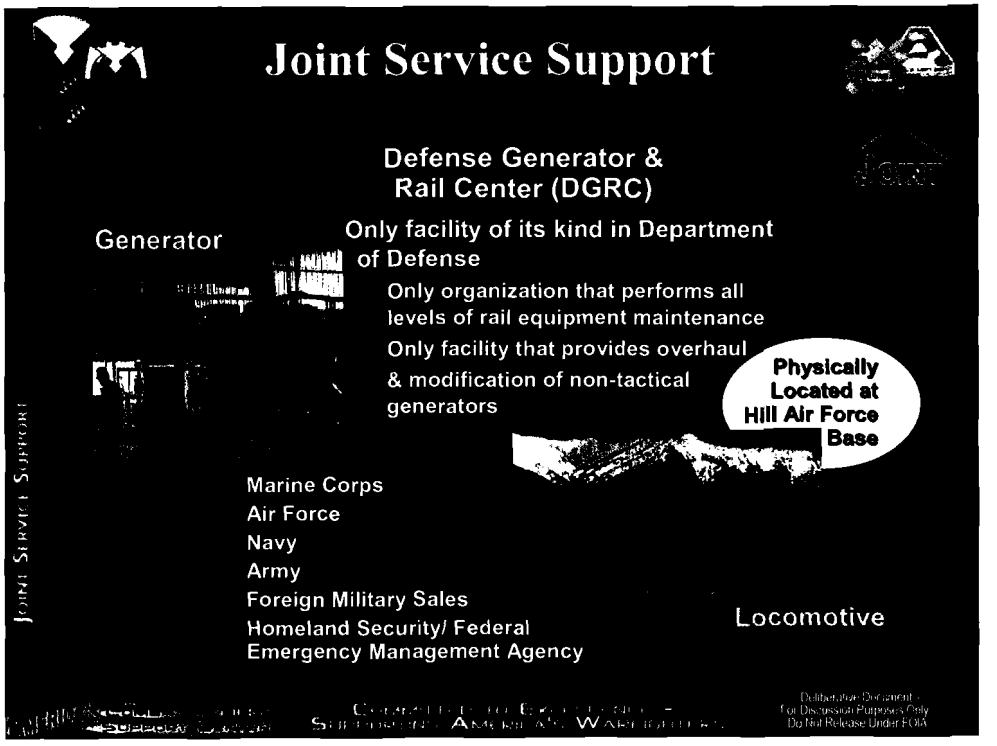
As you can see on the chart.... Anniston provides support to all services for Combat Vehicles, Artillery, Small Arms, Rail & Generators, Ammunition, and others.

It's also obvious that, provided the opportunity, Anniston could provide even greater support to the Marine Corps on systems common to the Army and Marine Corps such as M88 Tank Recovery Vehicles, Towed Artillery, M60 Armored Bridge Launchers, Bridges, and Small Arms.



As evidenced by this chart, the majority of all DoD combat vehicle, small arms, and artillery work is already performed at Anniston.

Designating Anniston as the DoD site for joint support of these commodities is an imperative step, not a high risk venture.



Anniston Army Depot is also responsible for the Defense Generator and Rail Center (DGRC) which, is physically located at Hill Air Force Base in Ogden, Utah.

DGRC is AMC's only agent providing field and depot maintenance to the joint services Rail Fleet. And the only agent providing depot support to the Corps of Engineers Prime Power Program.

Future initiatives include joint agency efforts to field equipment with reduced emissions and improved fuel economy through hybrid powered locomotives.

MEMORANDUM OF AGREEMENT

between the

U.S. Army Tank-automotive and Armaments Command (TACOM),

U.S. Army Industrial Operations Command (IOC),

Tooele Army Depot (TEAD),

Anniston Army Depot (ANAD),

and the

Defense Non-Tactical Generator & Rail Equipment Center (DGRC)

SUBJECT: Transfer of Operational Control of the DGRC to TACOM and ANAD

1. PURPOSE: The purpose of this Memorandum of Agreement (MOA) is to define the operational concept and working relationships for the realignment of the Defense Non-Tactical Generator & Rail Equipment Center (DGRC) from TEAD and IOC, to the ANAD and TACOM.

2. EFFECTIVE DATES: The transfer of operational control (OPCON) of DGRC has been directed by the Commanding General, U.S. Army Materiel Command (AMC). This MOA will be effective when signed by all parties and will remain in effect until formal transfer of command and control on 1 Oct 00. In addition, an abbreviated concept plan was developed and approved on 5 November 1998. The concept plan is intended to provide for transition of command and control on 1 October 2000. This concept plan (Attachment 1) is incorporated by reference herein and made a part of this MOA between the parties.

3. METHODOLOGY: The commencement of OPCON will be 1 October 1999, with a final transfer date for command and control of 1 October 2000. From inception of OPCON, the Director, DGRC, through ANAD and TACOM, is responsible for mission accomplishment and decision making at DGRC.

4. SCOPE: The element transferring to ANAD and TACOM is DGRC. Processes to be transferred will be addressed in activity checklists. The lead POC for each process will be responsible for completion of checklists. Checklists will include the process description, actions necessary to effect transfer, issues, lessons learned, and POCs at each affected installation. Checklists will state whether activity will be complete for OPCON, or be deferred until transfer of command and control.

5. ORGANIZATIONAL STRUCTURE: The DGRC and associated depot maintenance missions will be organizationally realigned under the ANAD and TACOM. Upon commencement of OPCON, the Director, DGRC, will report to the ANAD Director of Production and will be senior rated by the General Manager for Production Operations, ANAD.

6. PERSONNEL: During OPCON, TACOM Civilian Personnel Advisory Center (CPAC), in conjunction with the TEAD Civilian Personnel Advisory Center (CPAC), and the West Civilian Personnel Operation Center (CPOC) (Fort Huachuca), will identify all personnel for transfer to TACOM (ANAD). TACOM CPAC will provide personnel staff advice in all personnel functional areas as necessary. TACOM CPAC will coordinate the preparation and tracking of "Request for Personnel Actions" relating to the transfer.

7. FUNDING: Resource management officials will agree on the amount, type, and flow of funds that will transfer to TACOM from IOC. The OPCON period will be used to address, document, and resolve any financial issues where adjustments may be required.

8. PROVISIONS:

a. MISSION: OPCON, as defined by JCS Publication 1-02, Field Manual 100-5, and AMC Regulation 10-1, will be effected IAW the methodology outlined in paragraph 3 above. TACOM will assume authority for headquarters oversight of DGRC.

b. Any equipment or facilities projects in execution, or the budget, will continue to be supported by the IOC until transferred to TACOM at command and control.

9. LEGAL:

a. Responsibility for awards, claims, disputes, and settlements arising out of matters (contractual and otherwise) will transfer with funds management, regardless of when the incident occurred or when litigation begins. Exceptions will be made only by the TACOM Chief Counsel after consultation with, and agreement by the IOC Chief Counsel.

b. All intellectual property rights including patents, trademarks, copyright and rights in trade secrets, generated by, or belonging to DGRC, will become the property of TACOM upon commencement of OPCON. All royalty payments related to intellectual property which are owed, such as a depot element, shall also become the property of TACOM upon the commencement of OPCON. All technical data and computer software belonging to DGRC will become the property of TACOM upon the commencement of Command and Control.

c. Equal Employment Opportunity: TEAD will retain liability and responsibility for litigation, claims, or settlements arising out of complaints until transfer of funds management as called out in para 9.a. Exceptions will be made only by the TACOM Chief Counsel after consultation with, and agreement by the IOC Chief Counsel.

JOHN S. CALDWELL, JR.
Major General, USA
Commanding
TACOM

20 DEC 1999

JOSEPH ARBUCKLE
Major General, USA
Commanding
IOC

02 FEB 2000

Defense Generator and Rail Center

Physically located at Hill Air Force Base in Ogden, Utah, Anniston Army Depot is also responsible for the Defense Generator and Rail Center (DGRC) that provides both large generator and locomotive overhaul and field support to Army, Navy, Air Force, USMC, and the Corp of Engineers.

- DGRC is AMC's only agent providing field and depot maintenance to the joint services Rail Fleet. And the only agent providing depot support to the Corp of Engineers Prime Power Program.

- Mission was established in 1942. Anniston Army Depot assumed command & control from Tooele Army Depot in 2000.

- DGRC executes the rail fleet regulatory inspections and maintenance in compliance with defense regulations and Code of Federal Regulations, Title 49 and Association of American Railroad (AAR) requirements. DGRC is a committee member of the Inter-Service Locomotive Management Steering Group (ILMSG) conducting fleet reviews and coordinating distribution plans for joint services.

- DGRC works closely with the 249th Prime Power Engineering Battalion, FMS, and the Air Force in overhauling 500KW and above power distribution systems. Backup fielding and maintenance support is also provided.

- Future Initiatives include joint agency efforts to field equipment with reduced emissions and improved fuel economy through hybrid powered locomotives. Battery-electric and fuel cell technology systems are being investigated in a joint effort with the Inter-Service Locomotive Management Steering Group, US Army Research, Development and Engineering Command, and Industry.

POINT PAPER

SUBJECT: Defense NonTactical Generator & Rail Equipment Center (DGRC) Overview

1. PURPOSE: To provide information on the organizational structure and missions of the Defense NonTactical Generator & Rail Equipment Center

2. FACTS:

a. Mission

(1) The mission of the Rail Center is to provide maintenance support, ensuring readiness of DoD's locomotive fleet, rail cars, and non-tactical generators to effectively accomplish DoD peacetime mission and support to the Army's Power Projection Platform, while providing the same level of support to joint service agencies. Other customers include Air Force, Navy, Marines, SDDC, Foreign Military Sales, Corp of Engineers, Bureau of Broadcasting (Voice of America).

(2) The Rail fleet is stationed throughout CONUS, it is essential to daily loading operations and for deployments at Forts, Ammunition Plants, Ocean Terminals and Depots for movement to the point of debarkation. Rail remains essential to installation operations and is the lowest cost alternative for deployment. The generators are deployed CONUS and OCONUS in support of Installations and Defense operations in war zones.

(3) Portions of DGRC's mission are validated by DoD 4140.50-R, Management and Standards of DoD locomotives. This regulation assigns TACOM as the focal point for maintenance support of locomotive equipment to include mobile inspection certifications and maintenance services as well as depot overhaul. DGRC is TACOM only agent providing these services. Management of Army Rail Equipment (AR56-3) identifies policies and command responsibilities delegated to DGRC. The Prime Power Program, (AR 700-128) assigns AMC as the Focal point for overhaul of Prime Power Program equipment. DGRC is AMC's only agent providing these services.

b. History:

The maintenance mission located at Hill Air Force base was established in 1942 under Ogden Arsenal. In 1944 the mission was transferred to the Transportation Corps and expanded to all DoD rail equipment. The mission transferred again in 1956 to Utah General Depot and in 1964 to Tooele Army Depot. In the early 1970's the mission was expanded to include non-tactical generators. In 2000 the mission was transferred to its current headquarters, Anniston Army Depot. The operation resides at its original location on Hill AF Base on 28 acres with 6 major maintenance structures encompassing 55,243 square feet of production space.

c. Current:

(1) DoD fleet support is accomplished by performing Regulatory Inspections, Unit and DS/GS maintenance support via mobile maintenance teams deployed to equipment locations. Depot level support is performed at the base location at Hill AF Base. DGRC is the only organization that performs all levels of rail equipment maintenance and overhaul/modification of non-tactical generators.

(2) DGRC is a committee member of the U.S. Army Inter-Service Locomotive Management Steering Group (ILMSG). The group objective is to conduct locomotive management reviews and coordinate distribution plans as well as to facilitate integrated management for joint services through exchange of expert advice.

d. Future Initiatives:

(1) DGRC is collaborating in a joint effort with the Air Force for maintenance support to the Deployable Power Generation & Distribution System. This generator system rated at 960KW is currently being fielded to the Army and Air Force to provide an airlift deployable, logistically affordable, electrical power system of minimum size, weight, and fuel usage.

(2) In an effort to reduce emissions and improve fuel economy the U.S. Army Inter-Service Locomotive Management Steering Group (ILMSG) of which DGRC is a member, is researching potential purchase and follow-on maintenance of a hybrid-powered locomotive. This locomotive will be diesel/battery-electric and meets current and known future environmental emission limitations.

(3) DGRC is a member of an international consortium in development through to demonstration and commercialization of the world's largest fuel cell vehicle, a 109 metric ton, 1.2 MW locomotive for DoD and commercial railway applications. This project is funded by the US Army Research, Development, and Engineering Command's National Automotive Center (NAC). This project promotes a leading edge in increased energy efficiency and reducing dependency on oil. This project is currently in phase one of a three-phase process.