

Meeting w/ Brian Simmons

28 July 2005

RRAD

28 July 2005

- Barry Rhodes
- TB Stop let me
- Patton Tidwell
- Jim Rupp
- James Yates

Community responses to Alabama union

- Capacity is the issue
- 2003 data in old
- 9.0 M DLHs for ANAD in FY/06 new orders in AWPS

RRAD community meeting 16 June 05

SRG Jan/Feb/March meeting minutes

- Army was not convinced of other depot abilities to do the RRAD work
- 20% excess in depot wait at one point in Army analysis for all wait depots
 - expected 85% capacity utilization w/ 15% available for surge
- RRAD closure builds 2.6M DIT at ANAD & LEAD
 - based on 1.5 shifts instead of one shift
 - 60 hours v. 40 hours
- * Key issue is the way the department figured capacity which was in error *
- depot employees in Theater & FRAs
- unique RRAD capabilities
 - M1 Roadwheel remanufacturing - no one else does it
 - cert road test for 3200 miles
 - no commercial source has yet met this requirement or any other organic source
 - Missile recert for Patriot - TMRF & storage
 - Bradley transmission
 - commercial recert/failed quality
- 2002 CITE from SEC White for RRAD
- 75% will not move
 - 12% moved w/ BRAC 95 recommendations
- one MILCON, one time costs to build capacity of LEAD & ANAD

cut at LEAD
Start at MILCON

RRAD community meeting 16 June 05

SRG Jan/Feb/March meeting minutes

- Dry was not convinced of other depot abilities to do the RRAD work
- 20% excess in depot wait at one point in Dry analysis for all wait depots
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- one MILCON, one time costs to build capacity at LEAD & ANAD

cut at LEAD
store at MILCON

- military value
- overall depot rating 2.69 v 2.61
- what about each of the specific sub criteria?
- personnel deploy to theater, this was not taken in to consideration
 - not emerging essential positions, but volunteers or directed "details"

- received all HMMWV supplemental @
- RRAD producing armor for vehicles
- appears to be disjointed between Aug 2 Joint Com - service groups

DLA piece:

- Jukes will need to be designated as a SDP
- DCA intended to make RRAD a SDP until the recommendation to close RRAD

Munitions Center:

- about 3M ft² of munitions that will need to be relocated
 - BGAD 200k ft² avail
 - MCADP 1M ft² avail
 - MCADP is almost full
- RRAD has 87 Cat 1, 2 ignitor
- reconstruction of Chapparral is ~\$3M
- what happens to the Sparta Rocket motors?
- how do munitions personnel or MCADP TDA's get incorporated?
 - what happens to them?
- what about the retrograde of munitions?
 - where will it go?

San Antonio Hearing

11 July 2005

- KBH - should not use 2003 data
- homeland defense / security not considered

Texarkana

Cory Hall (TX)

- unique joint log. facility
- Munitions / DDRT / depot synergy
- combat / tactical vehicles skilled / dedicated workforce

San Payer (ARK)

- CITE designations unique to RRAD
 - Patriot & Rubber are the only DoD sources
 - designation does not follow to the joint installations
- unique capabilities
 - Bradley transmissions
 - Patriot certification
 - rubber products
 - track remanufacturing
 - M1 Roadwheels

- SRG notes from meetings that supported keeping RRAD open conflict w/ closure recommendation

San Canyon (TX)

- deviation from criteria 1 w/ move to lower valued installations
- no credit for synergistic location
- CITE for TV
 - LEAD #1, RRAD #3
 - reported processed to LEAD
- DDRT worked #1 for central region
 - move to OK City, OK is a lower MV

- MILCON at Forten is for a facility 65% of the current location

criteria 3 deviation

- ~~AWO~~ surge capacity not considered when VCSB used 60 hours v. 40 hour work week

- did not consider FY05 or 06 workload and used 2003 data => things are drastically different today

criteria 5

- 30% savings in ~~labor~~ ^{overhead} is incorrect
- costs & savings are not correct

criteria 8

- no inclusion of environmental clean up costs
- new permit costs at joining installations

Joe Robles

- more compelling reasons today
- unacceptable risk to capacity, workload interruption, and you cannot just move a CITE
- Army does not have excess capacity => diff from 2003 to 2005
 - work tripled from 2.1 to 6.4 M DLHs
 - shift calculations are wrong, 60, 40 hours
- risk to continued operations by moving RRAD and by changing everything at Anniston
- takes considerable time to build a capable ^{skilled} workforce => there will be a break in level of performance/capability if / when this is moved

KBH - GAO comments

- need RRAD
- Army comments from staff meetings regarding need to keep RRAD
- GAO -
 - cost to replicate rubber omission is an unacceptable risk
 - artificial process
 - commercial producers cannot successfully produce
 - increased workload/storage at Mc Aster since 2003
 - => will need to build on-site to move RRAD into
- DPRT was highest rated
 - capacity not avail at Taker
 - Taker is in the middle of OK City, OK
 - \$34M in MILCON
 - can expand at RRAD for on-site
 - will expand based on future incoming troops
- 2003 data v. current workload
- is it right to spend \$150M to move RRAD
- what about surge?
- RRAD performs for the Army today and will perform in the future
- this is the last authorized BRAC, do not close unneeded facilities

ML
 Gen Lucier (ARH)

- SAAP
 - critical capabilities & intellectual properties
 - D2I owns some of the processes
 - M918 cyze could be impacted
 - DRMS impacted
 - denial capabilities
 - contrary to competitive DOD contracting practices by Army directing workload to other Army facilities

- 1.14M to establish capabilities in addition
 - equip & tooling
- loss of proprietary data
- cannot purchase or replicate experience
- part of the Red River Complex

Long Ross (ARK)

- 35% of RRAD & LSAMP sites in Arkansas
- inconsistencies in MIL VAL & capacity calculations
- costs erroneously reported
- critical skills
- complexity did not account for all sites at LSAMP
- May 29, 2005 ASIP \Rightarrow over 400 personnel at LSAMP
- demil, production, maintenance & storage ~~capabilities~~ ^{capabilities}
- open burn & detonation demil
- 1.23M ft³ in storage



Red River

1 Mar 05

SRG meeting # 32



- Anniston (24) and Letterkenny (39) have higher MV than Red River (40)
- Industrial JCSG determined that remaining capacity sufficient if Red River closed - Army is not yet convinced
- The model used does not support the reality of mission requirements, nor accurately reflect Red River's military value in this instance
- The current base of work differs significantly now from the 03 data, (4 million DLH vice 2.1 million DLH) and that this base is more representative of the workload that we can expect in the foreseeable future
- Estimate based on assumption of 50% surge capacity requirement; Red River surpassed the FY 03 surge requirement in its routine operations in FY 05 and continues to increase its mission load -- in support of what is considered a "small" war
- If the base remains at 4 Million DLH, or continues to grow, does this recommendation still make sense?

TWV Transformation Summary

(Base and Ideal)

	FY06	FY07	FY08	FY09	FY10	FY11	FY12	FY13	FY14	FY15	FY16	FY17	FY18	TOTAL
FMTV (M35/809/839 Replace)	2793	3920	4104	3707	4450	3705	712	1361	1362	1362	1315	1315	1315	31421
Ideal Qty		4815	4815	4815	4815	4815	4815	4815	4815	4815	4815	4815	4825	57790
HMMVV Recap Qty	4556	4126	4126	4128	4134	4134	10500	10525	10525	10524	10500	10500		88278
Ideal Qty	6654	6654	6654	6654	6654	6654	6654	6655	6655	6655	6655	6655	6601	86454
M916/920 Replace Qty	100		96	94	92	90	133	133	133	132	132	132	132	1399
Ideal Qty		246	246	246	246	246	246	246	246	246	245	245	245	2949
HEMTT Recap Qty	441	382	533	535	537	574	676	675	675	675	675	675	675	7728
Ideal Qty	699	698	699	698	699	698	699	698	699	698	699	698	699	9081
Trailers Qty	1817	1867	3054	3174	3174	3224	3283	3312	3312	3400	3400	3400	3397	39814
Ideal Qty	1990	4720	5278	5219	5160	4960	4680	4205	1920	1502	180			39814
HET Recap Qty							100	100	100	100	100	100	100	700
Ideal Qty							248	248	248	248	248	248	248	1736
M917 Replace Qty							59	59	59	59	58	58	58	410
Ideal Qty		146	146	146	146	146	146	146	146	147	147	147	147	1756
M915A1 Replace Qty							476	476	476	476	476	476	475	3331
Ideal Qty		281	281	281	281	281	281	282	282	282	282	282	282	3378
PLS Recap Qty							309	309	309	308	308	308	308	2159
Ideal Qty							498	498	498	498	498	498	497	3485

Notes: New procurement shown in black, Recap in green, Ideal qty in blue.

Data as of: 31 May 05

Bieri, Elizabeth, CIV, WSO-BRAC

From: Pulignani, Ronald J LTC ASA(I&E) [Ronald.Pulignani@us.army.mil]
Sent: Monday, August 08, 2005 9:08 AM
To: Bieri, Elizabeth CIV WSO-BRAC; Delgado, George CIV WSO-BRAC
Subject: FW: BRAC Commission Staffer Questions (UNCLASSIFIED)
Attachments: TWV Strategy to Industry 23JUN05-Final.ppt

Classification: **UNCLASSIFIED**

Caveats: NONE

Is this what you are looking for?

From: Leach, Catherine Civ AMCSO
Sent: Friday, August 05, 2005 11:06 AM
To: Pulignani, Ronald J LTC ASA(I&E)
Cc: Powell, Daryl Civ AMCSO; Wheeler-Contractor, William ALION; 'Thomas Resau'
Subject: FW: BRAC Commission Staffer Questions

LTC Pulignani,

Reference OSD BRAC Clearinghouse Tasker C0660 and Commission request for more info on questions 27, 30 and 32.

Response to question 27 is provided below.

Please contact us if you have any questions.

Cathy Leach
HQs, U.S. Army Materiel Command
AMC Stationing Office
ATTN: AMCSO
9301 Chapek Road
Fort Belvoir, VA 22060-5527
Phone: (703) 806-8609, DSN 656
Fax: (703) 806-9043/9068, DSN 656
E-mail: catherine.leach@us.army.mil

-----Original Message-----

From: Westby, Donna R GS TACOM [mailto:donna.westby@us.army.mil]
Sent: Friday, August 05, 2005 8:56 AM
To: Wheeler-Contractor, William ALION
Cc: Leach, Catherine Civ AMCSO; Westby, Donna R GS TACOM; Smith, Curtis M MR TACOM; Young, Prince; Wyckoff, Teresa GS TACOM-WRN; Hasenyager, Raymond MR GS TACOM-WRN
Subject: RE: BRAC Commission Staffer Questions

Bill - Here is the response from PEO CS/CSS regarding Q# 27 (HMMWV RECAP):

8/11/2005

The following is provided in response to the staffer question on future HMMWV RECAP funding.

The FY06 President's Budget for this program, sent to Congress in Feb 05, identifies the following funding profile for HMMWV RECAP by dollar and by quantity:

FY06 - 32.8 M for 676 vehicles
FY07 - 34.3 M for 692 vehicles
FY08 - 131.3 M for 2629 vehicles
FY09 - 134.0 M for 2631 vehicles
FY10 - 45.6 M for 869 vehicles
FY11 - 46.6 M for 870 vehicles

FY06-11 TOTAL - 424.6 M for 8367 vehicles

During the current fiscal year, this program has received supplemental funding resulting in total FY05 funding of \$231.6 M for 4399 vehicles. While this program is a candidate for additional funding above this profile for FY06 and beyond thru continuing POM adjustments or additional supplementals, the respective dollars and quantities have not been finalized. With respect to FY06, however, the Vice Chief of Staff of the Army has stated his intent to obtain funding to procure a target 11,121 RECAP vehicles.

As discussed, it is also necessary to correct the original statement provided by the Industrial Cross Service Group with respect to HMMWV RECAP and the tactical wheeled vehicle strategy. The statement reads as follows from your message:

ANSWER: The Tactical Wheeled Vehicle strategy identifies an unconstrained requirement for 6554 vehicles each year through 2018. The constrained requirement (i.e., in view of probable funding availability) is 4550 vehicles per year through 2018. Currently, only \$32 million for FY06 has been funded. The remainder of the requirements will be submitted in the FY07-FY11 POM this fall.

In fact, the base quantity, as reflected on the attached chart, has a quantity of 4126 vehicles from FY07-11, but accelerates to over 10,000 vehicles per year after FY11 (the end of the current POM). This compares to the steady state ideal quantity of 6654-6655 vehicles per year thru FY18. While the two profiles total to a similar overall quantity and end in approximately the same timeframe, the ideal strategy benefits the Army by significantly accelerating the program within the current POM.

Curtis for Donna...

-----Original Message-----

From: Wheeler-Contractor, William ALION [mailto:bill.wheeler@us.army.mil]
Sent: Wednesday, August 03, 2005 11:24 AM
To: Donna Westby (donna.westby@us.army.mil)
Cc: Leach, Catherine Civ AMCSO
Subject: FW: BRAC Commission Staffer Questions
Importance: High

Sorry I for got to attach the original questions and answers.

Bill

-----Original Message-----

From: Wheeler-Contractor, William ALION
Sent: Wednesday, August 03, 2005 11:20 AM
To: Donna Westby (donna.westby@us.army.mil)
Cc: Leach, Catherine Civ AMCSO

Subject: BRAC Commission Staffer Questions

Importance: High

Donna,

Mz.Elizabeth Bieri, BRAC Commission staffer, is asking for additional information concerning answers provided by the IJCSG or TACOM to questions #27 and # 32 from OSD BRAC Clearinghouse Tasker C0660. The original questions and responses are attached.

27. Regarding question #27, Ms. Beiri believes that there is funding beyond FY06 for HMMWV RECAP program. Her comment is based on her normal civilian position. Please verify funding status.

32. The IJCSG provided the original response to this question but was insufficient to satisfy Ms. Bieri. Ms. Bieri is requesting (1) more specificity on the differences and commonality of repair process between the M1 and Bradley transmissions and (2) Is there anything being done at RRAD that is unique and would cause ANAD to be unable to incorporate the Bradley transmission into the M1 transmission line?

Please respond via email by COB today. Sorry for the very short fuse. Thanks for your help on this.

Bill
AMCSO
DSN656-8189

Classification: **UNCLASSIFIED**

Caveats: NONE

08/05/2005 15:11

256 741 5209;

Aug-5-05 18:02;

Page 2

sent By: ANAD OPE;

NMWR 9-2520-276-1

CHAPTER 1

INTRODUCTION

Section I. GENERAL INFORMATION

1.1 SCOPE

a. This National Maintenance Work Requirement (NMWR) contains information required to overhaul the transmission assembly used in M1A1 and M1A2 Abrams tank. This NMWR covers transmission assemblies listed in *Table 1-1*.

Table 1-1. Transmission Assembly

NOMENCLATURE	PART NUMBER (CAGEC)	NSN
Transmission Assembly	12338030 Including 12321800 (19207)	2520-01-207-3527 ¹
Transmission Assembly	12338031-1 Including 12321800 w/Battle Field Override (19207)	2520-01-325-8834

¹ Use NSN 2520-01-203-0178 until exhausted.

b. To assure high quality processes during overhaul, the depot/contractor will prepare specific instructions, i.e., build sheets, work instructions, etc. for all workstations. Extract information from this NMWR and all referenced technical publications thereof. The Procuring Activity/Commodity Manager (PA/CM) will provide other information if or when required.

c. These instructions are for use by depot/contractor personnel. They apply to the transmission assemblies and, in case of conflict, take precedence over all other documents pertinent to depot maintenance of the item. Condition of overhauled transmission assemblies will be that utility and performance are equal to that of a condition code A as defined in **AR 725-50**.

d. Overhaul shipping containers in accordance with **NMWR 9-8145-211**.

e. Refer to the **AR 25-30** indexes to locate the technical manuals associated with this transmission assembly. Access indexes by National Stock Number (NSN), part number, model, or Line Item Number (LIN). The AR also provides a schedule for publishing new and/or revised technical manuals.

f. Refer to **Appendix A** for titles of all referenced publications.

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Sent By: ANAD DPE;

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1.2 FORMS, RECORDS, AND REPORTS

Department of the Army forms, records, and procedures used for equipment maintenance by depot and/or contractor personnel will be those specified in *DA PAM 738-750, AR 700-138*, or work directive and/or contract. A list of the forms referenced in this NMWR is included in *Appendix A*.

1.3 REPORTING EQUIPMENT IMPROVEMENT RECOMMENDATIONS (EIR'S)

If the transmission assembly needs improvement, let us know. Send us an EIR. You, the user, are the only one who can tell us what you don't like about the equipment. Let us know why you don't like the design or performance. Put it on an *SF 368*. Mail it to us at: Commander, US Army Tank-automotive and Armaments Command, ATTN: AMSTA-TR-QHS, Warren, MI 48397-5000. A reply will be furnished to you.

1.4 ENGINEERING CHANGE PROPOSALS (ECP'S)

Submit engineering change proposals (ECP's) using *DD Form 1693*. Completed forms should be mailed direct to: Commander, US Army Tank-automotive and Armaments Command, ATTN: AMSTA-TR-QHS, Warren, MI 48397-5000. A reply will be furnished to you.

1.5 DEVIATIONS AND EXCEPTIONS

Process all request for deviations or exceptions to this NMWR as directed by Procuring Activity/Quality Product Manager (PA/PQM).

Section II. EQUIPMENT DESCRIPTION

1.6 DESCRIPTION

1.6.1 GENERAL

Refer to (*Fig. 1-1*). The transmission assembly is a cross drive transmission which utilizes a hydraulic torque converter and range planetaries for propulsion; a hydraulic pump and motor unit for differential steering control; and integral power assisted brakes. The hydraulic torque converter smoothly transmits engine torque to the transmission gearing. The transmission has fully automatic shifting, four speeds forward, and two speeds in reverse with lock-up capability in all ranges. The transmission is designed specifically for high-speed, track-laying vehicles capable of speeds of 40 to 50 mph. The modular design transmission consists of four primary subassemblies described in *Steps 1.6.2 thru 1.6.5* below.

1.6.2 INPUT DRIVE ASSEMBLY

The input module houses the torque converter, lock-up clutch, engine driven input gear train, main and scavenge pump, and two power takeoff (*PTO*) drives. A turbine driven gear train transfers the power from the torque converter to the input bevel gear in the center section.

NMWR 9-2520-276-1

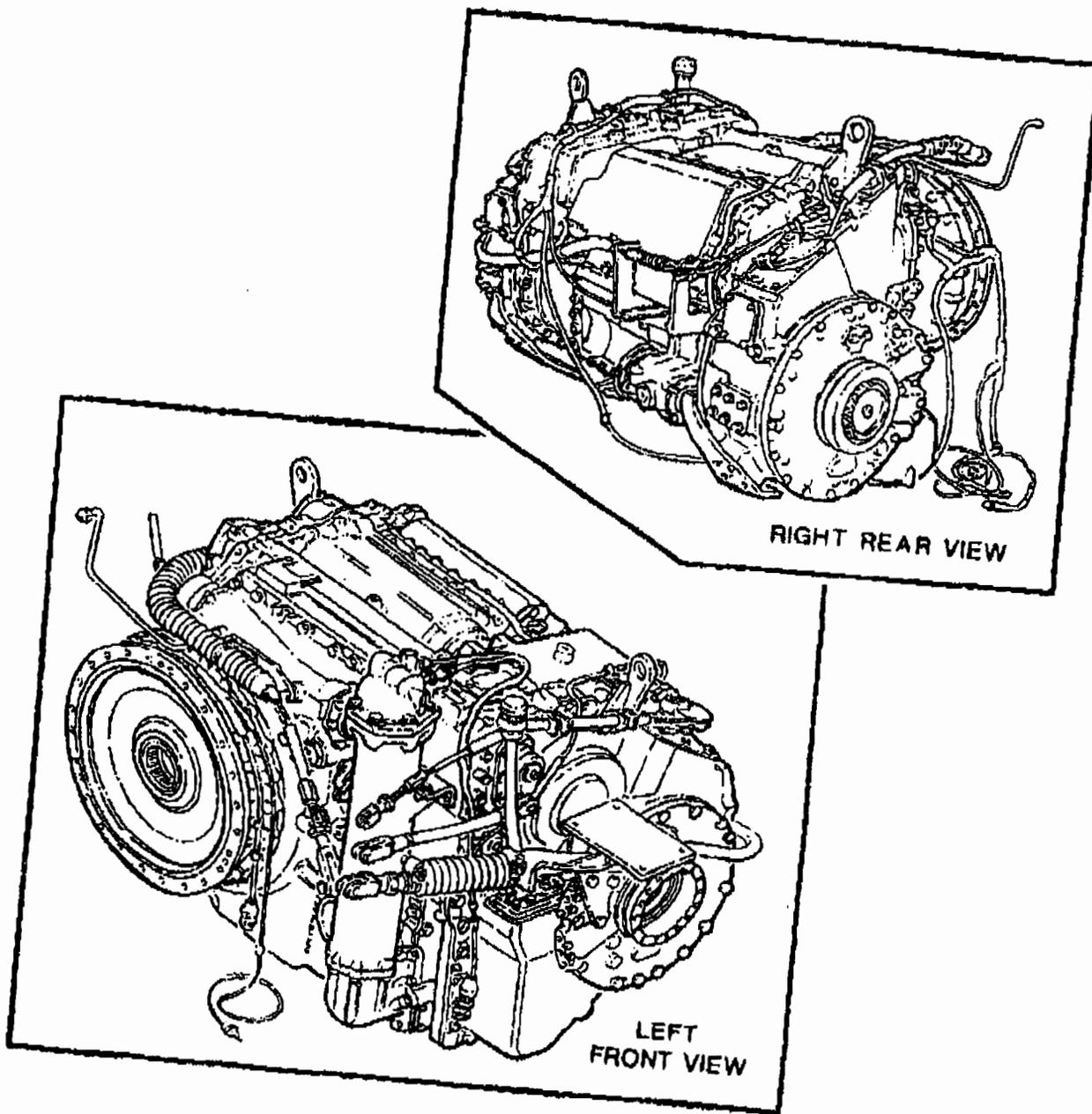


Figure 1-1. Transmission Assembly (SIN 3746 thru 11444) and (SIN 610U thru 3027U) - Overall View

4

DCN: 12048

Sent By: ANAD DPE;

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NMWR 9-2520-276-1**1.6 DESCRIPTION - Continued****1.6.3 CENTER SECTION ASSEMBLY**

The center section contains input bevel gear assembly, range input driven gears, planetary range pack, range pack output gears, output shaft, hydrostatic pump and motor assembly, hydrostatic steer drive shaft, and hydraulic valve assemblies. The hydraulic valve assemblies direct and control pressure flow throughout the transmission. The power-transmitting medium for the torque converter, control valves, clutches, and brakes is hydraulic fluid.

1.6.4 RIGHT HOUSING ASSEMBLY

The right housing assembly contains a combining planetary and brake pack.

1.6.5 LEFT HOUSING ASSEMBLY

The left housing assembly contains the hydrostatic steer reduction gear train, a combining planetary, and a brake pack.

1.7 DATA PLATES**1.7.1 EQUIPMENT DATA PLATE**

- (1) The equipment data plate is located on top of the center housing in the corner near the left output housing and the input housing. Refer to *Figure 1-2*.
- (2) Obtain new equipment data plates by requisitioning *PIN 12280263* for transmission *PIN 12321800*.
- (3) Transfer pertinent data from old data plate to new data plate before installing a new equipment data plate. Use 1/8-inch (3 mm) die stamps, stamp all pertinent data on new plate. The serial number on data plate must match number stamped in center housing located adjacent to the data plate location.
- (4) Use four new drive screws *PIN MS21318-21* and install new equipment data plate in the location shown on *Figure 1-2*. Remove broken drive screws from housing. If a drive screw does not hold properly, use a No. 31 drill and enlarge hole. Install next larger size (No. 6) drive screw.

1.7.2 OVERHAUL DATA PLATE

- (1) Remove and discard previous overhaul data plate from transmission assembly. Refer to *Figure 1-2* for plate location. Do not stamp data directly on any part, assembly, or item of equipment.
- (2) Obtain anew overhaul data plate by requisitioning *PIN 10930015* or by fabricating in accordance with *Figure 1-3*.
- (3) Use a 1/8-inch (3 mm) die stamp and stamp the overhaul data plate with serial number, initials or name of overhauling activity, and date of overhaul. Government overhauling activities will use the appropriate initials found in *YB ORD 1030*.

sent By: ANAD DPE;

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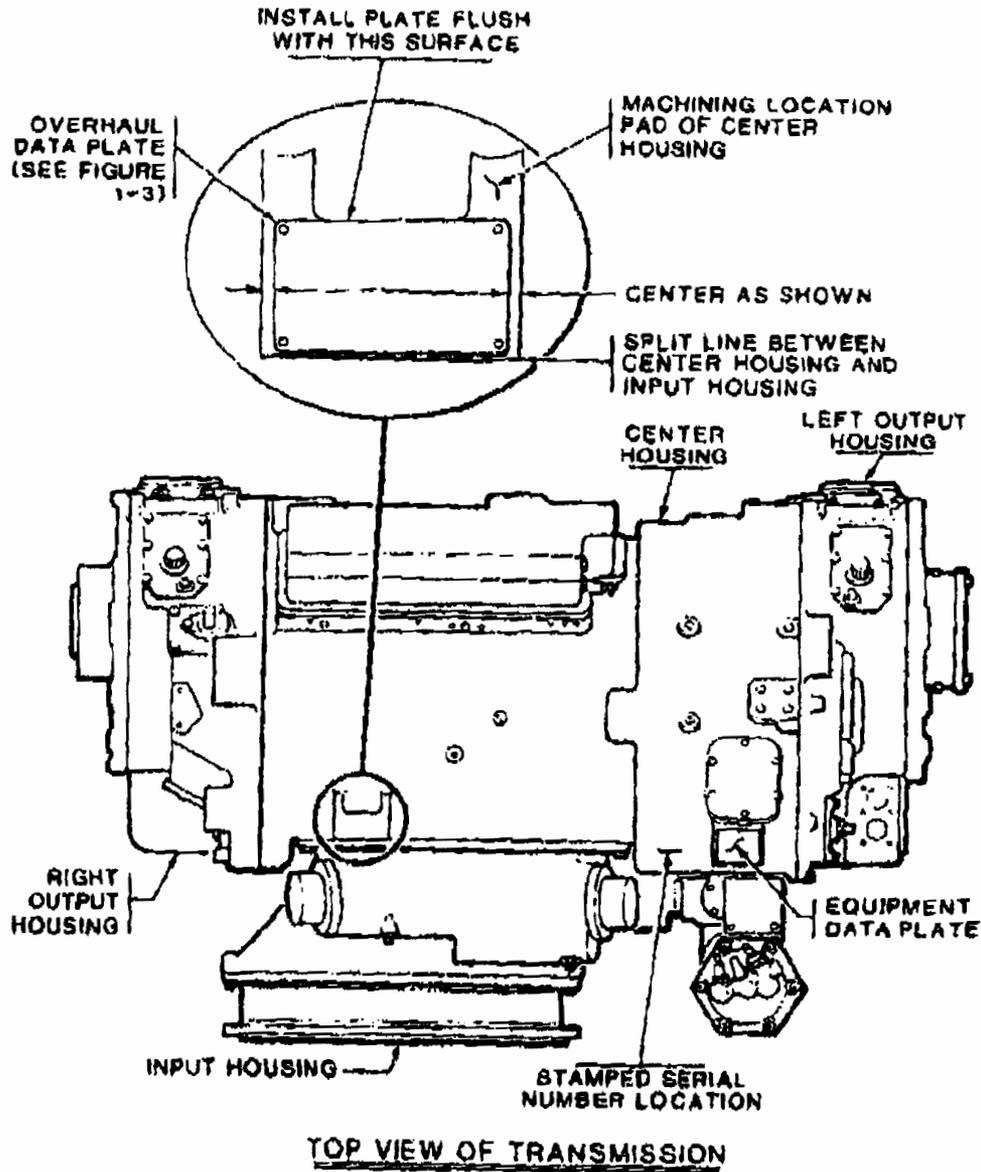


Figure 1-2. Transmission and Overhaul Data Plate Locations - All Configurations

6

NMWR 9-2520-276-1

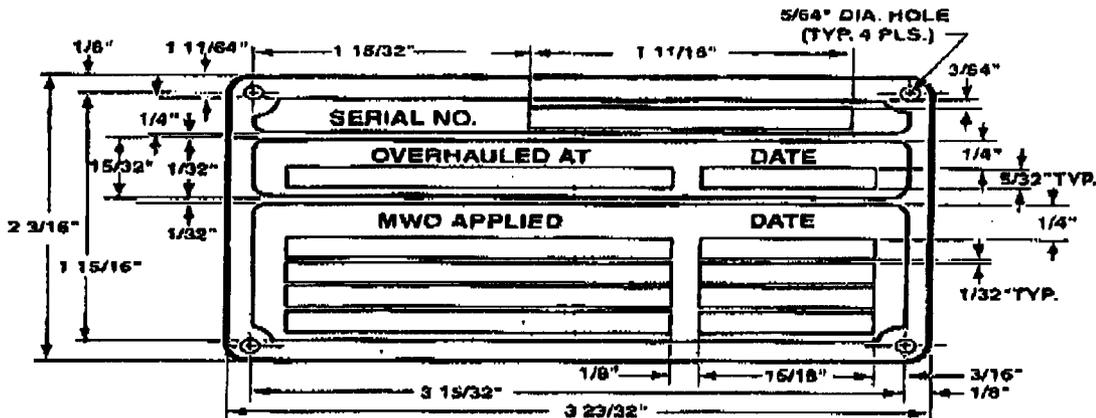


Figure 1-3. Overhaul Data Plate - Fabrication

1.7 DATA PLATES - Continued

- (4) Refer to Figure 1-2 for location and install overhaul data plate as follows:
 - (a) Clean the surface of installation area of housing. Apply adhesive (Item 7, Appx C) to back of plate.
 - (b) Install plate upright, centered on the housing machining location pad, in the position shown.

1.7.3 EQUIPMENT DATA PLATE IDENTIFICATION FOR VALVE BODY MODIFICATION

- (1) The equipment data plate is located on the top of the center housing in the corner near the left output housing and the input housing. Refer to Figure 1-2.
- (2) When Valve Assembly PIN 12371072 (11, Fig 4-4) has been installed as described in Section VI, the data plate must be marked to indicate that this modification has been done.
- (3) Use a 1/8-inch (3mm) die stamp, mark data plate with letters MOD V.B.. Place letters MOD V.B. as shown on Figure 1-4.

1-6

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1.8 TABULATED DATA - Continued

Weight (Dry):

Transmission only (SIN 3746 thru 11444) and 4375 lb (1986 kg)
(SIN 610U thru 3027U)

Transmission and container (SIN 3746 thru 11444) 5975 lb (2713 kg)
and (SIN 610U thru 3027U)

1.9 CONFIGURATION DATA

M1A1 increment III transmission assemblies, PIN 12321800 (SIN 3746 thru 11444) and (SIN 610U thru 3027U), consist of assemblies with container PIN 5705214, NSN 2520-01-210-8795. There are two configurations of PIN 12321800 transmission. Details for the two different configurations are as follows:

1.9.1 FIRST CONFIGURATION

- One Piece Hydrostatic Control Plate (Section VII)
- Improved System Pressure for Hydrostatic Control (Section VII)
- Secondary Control Regulator for Hydrostatic Eliminated (Section VII)
- Engine Driven Control Pump Eliminated (Section III)
- Improved Hydrostatic Control Piston and Connecting Link (Section VIII)

NMWR 9-2520-276-1

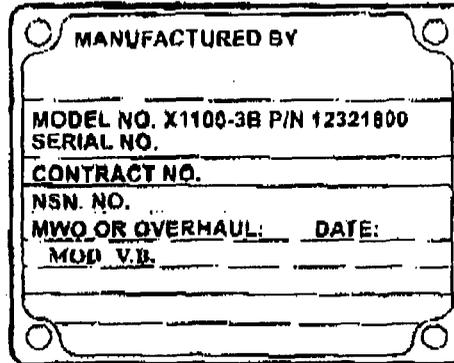


Figure 1-4. Equipment Data Plate - MOD V.B. Identification

1.8 TABULATED DATA

Type of Transmission	Cross Drive
Model	X1100-3B
Manufacturer	Allison Transmission, Division of General Motors
Commercial and Government Entity Code (CAGEC).....	19207
Lubrication System:	
Type	Gear Pump
Pressure rating	300 ±20 psi (2069 ±138 kPa)
Filter type	Full Flow (25 MICRON)
Type of fluid	
Normal operation +10 to +120°F (-12 to +49°C)	Engine Oil MIL-PRF-2104
Arctic operation -60 to +20°F (-51 to -7°C)	MIL-PRF-46167
Preservation and break-in	MIL-PRF-21260
Oil capacity	35 to 40 gal (132 to 151 L)
Dimensions W/O Shipping Container (Approximately):	
Length	64 inches (1625.6 mm)
Width	45 inches (1143.0 mm)
Height	43 inches (1092.2 mm)
Dimensions of Shipping Container (Approximately):	
Length	75 inches (1905.0 mm)
Width	60 inches (1524.0 mm)
Height	60.2 inches (1529.0 mm)

9

08/05/2005 15:11

256 741 5208;

Aug-5-05 18:03;

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Sent By: ANAD DPF;

DMWR9-2520-281

**DEPOT MAINTENANCE WORK REQUIREMENT
CONTAINING
NATIONAL MAINTENANCE REPAIR STANDARDS
FOR**

**TRANSMISSION: CROSSDRIVE, HYDROMECHANICAL
MODEL HMPT 500-3 WITH
CONTAINER ASSEMBLY NSN 2520-01-274-6449
AND
MODEL HMPT 500-3EC WITH
CONTAINER ASSEMBLY NSN 2520-01-338-2703
AND
MODEL HMPT 500-3ECA WITH
CONTAINER ASSEMBLY NSN 2520-01-471-1325
AND
MODEL HMPT 500-3ECB WITH
CONTAINER ASSEMBLY NSN 2520-01-466-3753**

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MICHIGAN 48397-5000.**

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08/05/2005 15:11
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sent By: ANAD DPE;

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EQUIPMENT DESCRIPTION AND DATA - Continued**0003**

- (8) Service brakes are used as parking brakes.
- (9) Each overall transmission ratio is infinitely variable with no power interruption in either forward or reverse.
- (10) Each transmission incorporates a continuously variable steering ratio at all vehicle speeds, permitting the vehicle to turn any curve without multiple steering corrections.

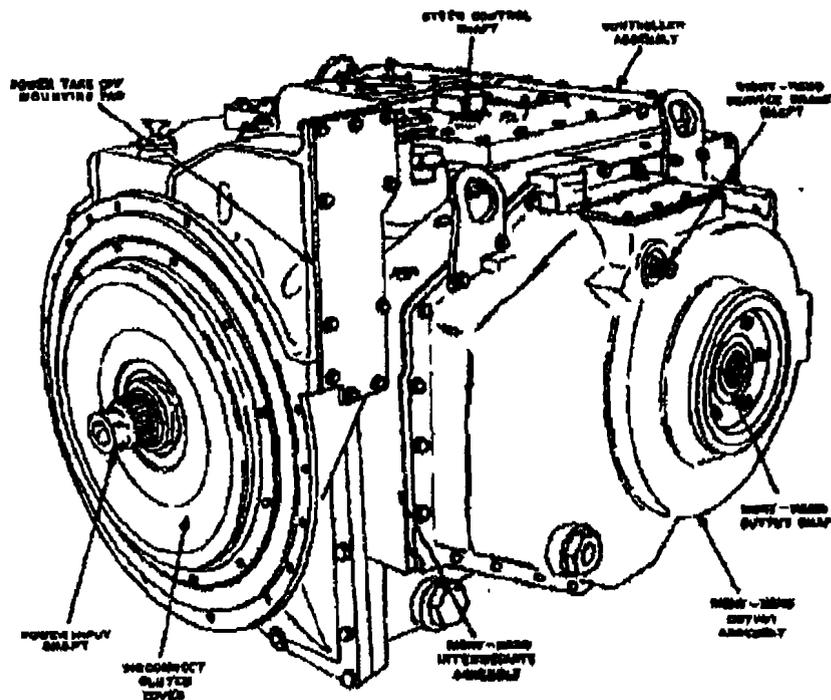


Figure 1. Transmission Model IIMPT 500-3 (Right Rear View).

0003-2

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DMWR 9-2520-281

EQUIPMENT DESCRIPTION AND DATA

0003**THIS WORK PACKAGE (WP) COVERS:****Equipment Characteristics and Capabilities, Equipment Data, Equipment Configuration and Data Plates**

EQUIPMENT CHARACTERISTICS AND CAPABILITIES

1. The HMPT 500 3, HMPT 500-3EC, 500-3ECA and 500-3ECB transmissions are crossdrive models, which deliver power to both left and right-hand final drive units of the BFVS and MLRS vehicles. The principal exterior components of the 500-3 transmission are identified in figures 1 and 2, and the principal exterior components of the 500-3EC transmission are identified in Figures 3 and 4.
2. The transmission consists primarily of a main housing, left and right-hand output assemblies (each containing an output carrier assembly), left and right-hand intermediate assemblies, controller assembly (500-3) or interface assembly (500-3EC), disconnect clutch assembly, input bevel gear assembly, two hydraulic pump motor assemblies, a third range clutch, a third range carrier assembly, a makeup and auxiliary pump assembly, a differential carrier assembly and a second range positive clutch assembly.
 - a. Delivers power to vehicle right and left-hand final drives.
 - b. Provides steering and braking for vehicle.
 - (1) Transmission output power varies with load with no interruption of shifting.
 - (2) Transmission provides variable steering ratio at all vehicle speeds. (Allows vehicle to turn smoothly without multiple steering corrections).
 - (3) Oil cooler is mounted on the engine.
 - (4) All hydraulic components required for transmission operation, except the oil cooler connections, are mounted inside the transmission.
 - (5) All drive controls for brake, steer and throttle are mechanically linked to transmission (reference TM 9-2350-284-20 and TM 9-1450-646-20). The electronics assembly electronically controls drive controls for clutch and gear selection.
 - (6) Transmission has mechanically actuated, oil cooled, multiple-disk type service brakes which permit braking of the vehicle.
 - (7) Transmission has dynamic brake capability by removing foot from accelerator (HMPT 500-3ECB only).

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EQUIPMENT DESCRIPTION AND DATA - Continued

0003

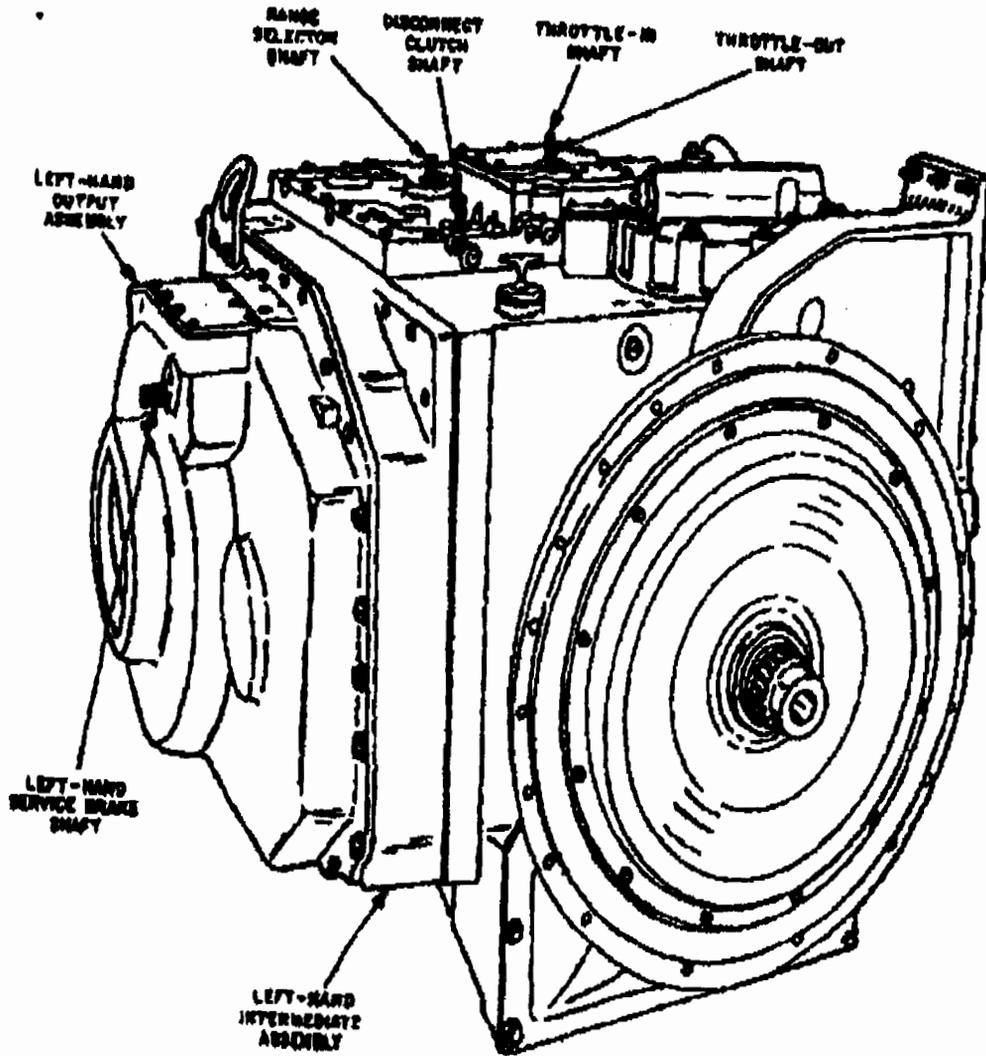


Figure 2. Transmission Model HMPT 500-3 (Left Rear View).

0003-3

DMWR 9-2520-281

EQUIPMENT DESCRIPTION AND DATA - Continued

0003

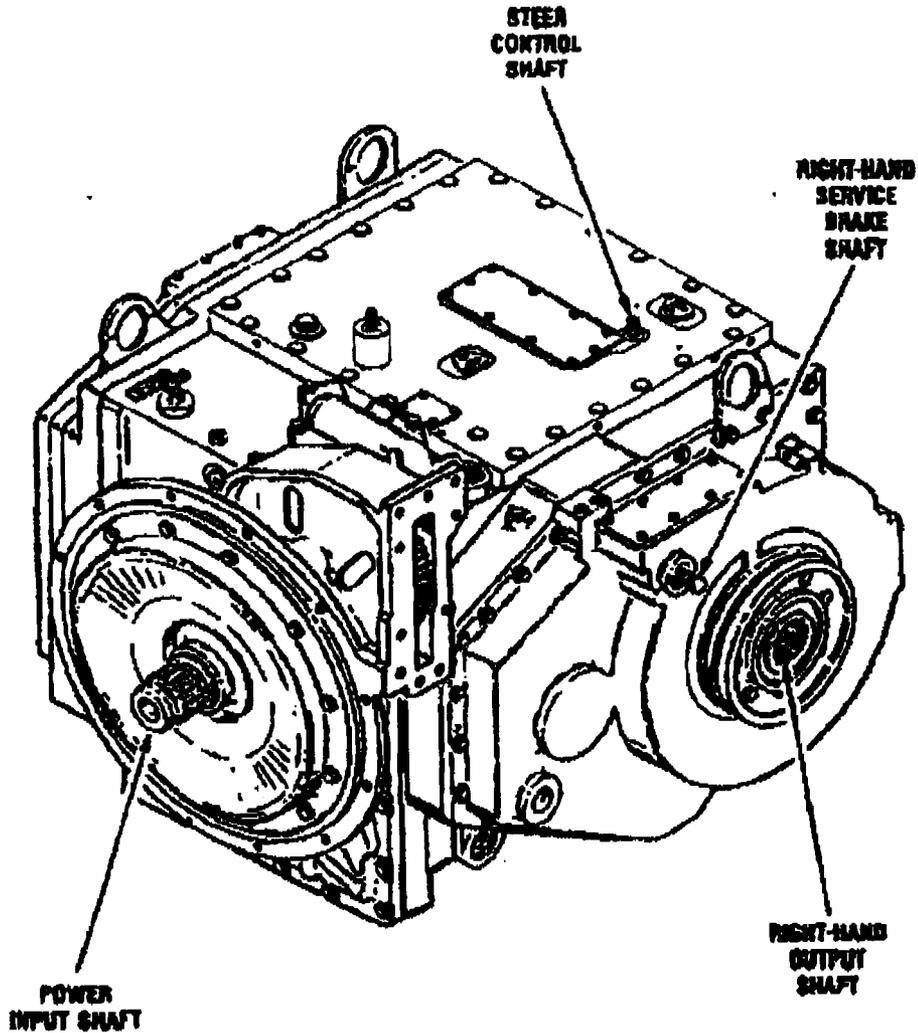


Figure 3. Transmission Model HMPT 500-3EC (Right Rear View).

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EQUIPMENT DESCRIPTION AND DATA - Continued

0003

Oil System:

- Input Driven Pump..... 2-gerotor elements
- Tow Pump..... 1-gerotor element
- Oil Specification Temperature:
- +5° F to +125° F (-15° C to +51.7° C)..... MIL-PRF-2104, Grade 15W40
- 70° F to +40° F (-57° C to +4.4° C)..... MIL-PRF-46167

Shipping and Storage:

- All Temperatures..... MIL-PRF-21260, Grade 2
- Oil Capacity (Less cooler circuit)..... 14 US gallons
(53 liters)
- Oil Filter..... 11629578
- Oil Filter Repair Kit..... 5705228
- Oil Temperature Normal (from cooler)..... 185° F to 195° F
(85° C to 91° C)

Gear Ratios:

- Forward..... Infinitely variable, neutral to 0.78:1
- Reverse..... Infinitely variable, neutral to 4.7:1

Pressures (at 1,500 rpm and 180° F (82.3° C)):

- Priority Circuit..... 180 psi (1,241 kPa)
- Make-up Supply..... 120-150 psi (827-1,034 kPa)
- Auxiliary Supply:
- No-load..... 0 psi (0 kPa)
- Heavy load..... 120 psi (827 kPa)

EQUIPMENT CONFIGURATION

There are two configurations of transmission, the HMPT 500-3 and the HMPT 500-3EC; however, the 500-3EC has two distinctive configurations (500-3ECA and 500-3ECB, which will both become obsolete as future changes are incorporated). Both transmissions include all hydraulic components required for operation and control, except for an oil cooler (on the Bradley transmission) which must be remotely mounted. Additionally, operator controls for the 500-3 transmission are mechanical and the operator controls for the 500-3EC transmission are mechanical and electronic. Requirements and specifications contained in this DMWR are for overhaul of HMPT 500-3 and HMPT 500-3EC (600 HP application) transmissions. HMPT 500-3 or 500-3EC equipment data plates located on top of the transmission identify these transmissions. Any variation between models is stated in the individual work packages and in the final assembly testing checksheets, which are provided for each configuration.

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EQUIPMENT DESCRIPTION AND DATA - Continued

0003

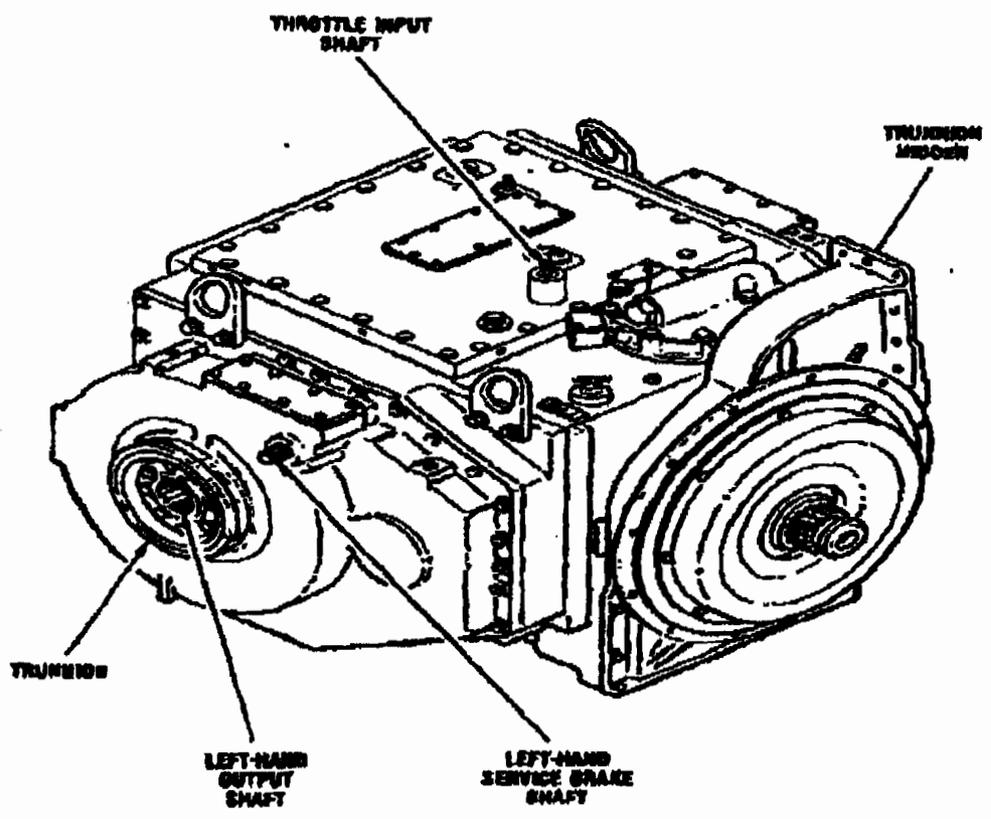


Figure 4. Transmission Model HMPT 500-3EC (Left Rear View).

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DMWR 9-2520-281

EQUIPMENT DESCRIPTION AND DATA - Continued

0003

1. Tabulated Data for HMPT 500-3.

Model.....	HMPT 500-3
Assembly Number.....	12364200
Type.....	Hydromechanical
Weight: (dry).....	1,943 lbs. (882 kg)
Weight: (wet).....	2,048 lbs. (929 kg)
Dimensions, overhaul:	
Length (Engine mounting face to rear).....	31.17 inches (791.7 mm)
Width.....	40.0 inches (1,016 mm)
Height.....	28.5 inches (724 mm)

DMWR 9-2520-281

EQUIPMENT DESCRIPTION AND DATA - Continued

0003

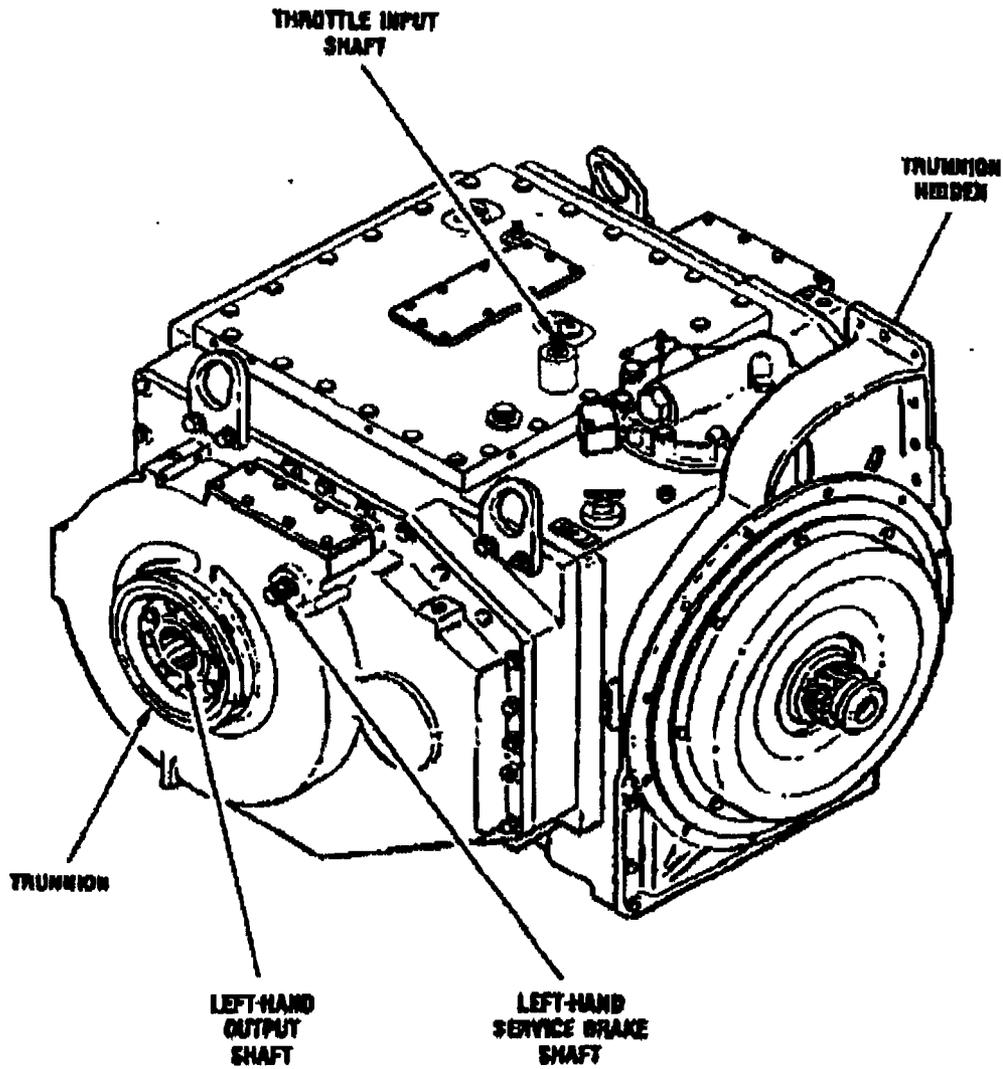


Figure 4. Transmission Model HMPT 500-3EC (Left Rear View).

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EQUIPMENT DESCRIPTION AND DATA - Continued

0003

Gearing:

Differential, Combining and Output Spur Gear, Planetaries
Input Spur and Spiral Bevel

Mounting:

Rear Support Input housing bolted to engine
Side Support Trunnions at left and right output housings

Oil System:

Input Driven Pump 2-gerotor elements
Tow Pump 1-gerotor element
Oil Specification Temperature:
+5° F to +125° F (-15° C to +52° C) MIL-PRF-2104, Grade 15W40
-70° F to +40° F (-57° C to +4° C) MIL-PRF-46167

Shipping and Storage:

All Temperatures MIL-PRF-21260, Grade 2
Oil Capacity (Less cooler circuit) 14 US gallons
(53 liters)
Oil Filter 11629578
Oil Filter Repair Kit 5705228
Oil Temperature Normal (From cooler) 185° F to 195° F
(85° C to 91° C)

Gear Ratios:

Forward Infinitely variable, neutral to 0.78:1
Reverse Infinitely variable, neutral to 4.7:1

Pressures (at 1,500 rpm and 180° F (82° C)):

Priority Circuit 180 psi (1,241 kPa)
Make-Up Supply 120-150 psi (827-1,034 kPa)
Auxiliary Supply:
No-load 0 psi (0 kPa)
Heavy load 120 psi (827 kPa)

2. Tabulated Data for HMPT 500-3EC.

Manufacturer Martin Marietta Defense Systems
Model HMPT 500-3EC
Assembly Number 12380500
Type Hydromechanical

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EQUIPMENT DESCRIPTION AND DATA - Continued **0003**

Weight: dry 1,975 lbs. (898 kg)

Weight: wet..... 2,065 lbs. (937 kg)

Dimensions, overall:

Length (Engine mounting face to rear)..... 31.17 inches
(791.7 mm)

Width..... 40.0 inches (1,016 mm)

Height..... 28.5 inches (724 mm)

Nameplate Location..... Top surface

Input Rating:

Maximum Torque 1,400 lb-ft (1,898 N-m)

Maximum Speed..... 2,600 rpm

Maximum Power..... 600 hp

Output Rating:

Nominal Torque 11,170 lb-ft (15,147 N m)

Nominal Forward Speed 3,200 rpm

Nominal Reverse Speed..... 544 rpm

Nominal Steering Torque per Side 6,798 lb-ft (9,218 N-m)

Rotation:

Input (Viewed from rear of transmission) Clockwise

Output (Forward operation viewed from right side)..... Clockwise

Drive Ranges (manually selected) Reverse, Start,
Neutral, Pivot Steer, Drive, Low

Brakes (service, parking) Wet, Multiplate,
mechanically applied

Hydrostatic Elements Four 21 cubic-inch, ball piston,
variable displaceable units

Gearing:

Differential, Combining and Output, Spur Gear, Planetaries

Input Spur and Spiral Bevel

Mounting:

Rear Support Input housing bolted to engine

Side Support..... Trunnions at left and right output housings

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Department of Defense

**DEPOT MAINTENANCE
CAPACITY AND UTILIZATION
MEASUREMENT HANDBOOK**

January 1997

**Office of the Under Secretary of Defense
for Acquisition and Technology**



OFFICE OF THE UNDER SECRETARY OF DEFENSE

3000 DEFENSE PENTAGON
WASHINGTON DC 20301-3000

January 24, 1997

FOREWORD

This Handbook is issued under the authority of DoD Directive 4151.18, "Maintenance of Military Materiel," August 12, 1992. Its purpose is to provide updated guidance for a common methodology to measure and provide visibility of the capacity and utilization of DoD organic depot maintenance activities that perform depot-level maintenance of military materiel.

DoD 4151.15-H, "Depot Maintenance Production Shop Capacity Measurement Handbook," July 1976 is hereby canceled.

This Handbook applies to the Office of the Secretary of Defense, the Military Departments, and the Defense Agencies (hereafter referred to collectively as "the DoD Components").

This Handbook is effective immediately and is mandatory for use by all the DoD Components. The Heads of the DoD Components may issue supplementary instructions when necessary to provide for unique requirements within their respective Components.

Send recommended changes to the Handbook through the appropriate channels to:

Office of the Deputy Under Secretary of Defense for Logistics
Assistant Deputy Under Secretary of Defense for Maintenance Policy,
Programs and Resources
3500 Defense Pentagon
Washington, DC 20301-3500

The DoD Components may obtain copies of this Handbook through their own publication channels. This publication is approved for public release; distribution unlimited. Authorized registered users may obtain copies of this publication from the Defense Technical Information Center, 8725 John J. Kingman Rd., Suite 0944, Fort Belvoir, VA 22060-6218. Other Federal Agencies and the public may obtain copies from the U.S. Department of Commerce, National Technical Information Service, 5285 Port Royal Road, Springfield, VA 22161.

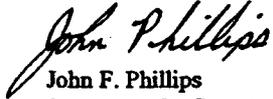

John F. Phillips
Deputy Under Secretary
of Defense (Logistics)

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REFERENCES

- (a) DoD Directive 4151.18, "Maintenance of Military Materiel," August 12, 1992
- (b) DoD 8910.1-M, "DoD Procedures for Management of Information Requirements," November 28, 1986, authorized by DoD Directive 8910.1, June 11, 1993

DL1. DEFINITIONS

DL1.1.1. Annual Paid Hours. The annual work hours per worker, including holidays, for single shift, 40-hour work week for which an employee is paid.

DL1.1.2. Annual Productive Hours. That portion of the annual paid hours per production worker that remains for direct application to the job after subtraction of holidays, leave, training, and other recognized indirect hours.

DL1.1.3. Availability Factor. The percentage of a single-shift work year that work positions can be used to accomplish direct productive work. This factor may include reductions for facility and/or equipment non-availability such as calibration and/or maintenance and/or repairs of real property and shop equipment, utility failure, unscheduled facility closures, and equipment installation and/or rearrangement.

DL1.1.4. Bottleneck. A process in a production flow that restricts the ability to achieve full, single-shift utilization of other processes either preceding or following the bottleneck.

DL1.1.5. Core. Depot maintenance core is the capability maintained within organic Defense depots to meet readiness and sustainability requirements of the weapon systems that support the Chairman of the joint Chiefs of Staff contingency scenarios. Core exists to minimize the operational risks and to guarantee readiness of these weapon systems. Core depot maintenance capabilities will comprise only the minimum facilities, equipment and skilled personnel necessary to ensure a ready and controlled source of required technical competence. The Military Services will use the DoD-approved methodology to compute core depot maintenance requirements.

DL1.1.6. Core Capacity Index. An indicator of the capacity, expressed in Direct Labor Hours (DLH), required by a shop or depot to provide essential maintenance capabilities as calculated in accordance with the approved DoD core methodology.

DL1.1.7. Depot Maintenance. That maintenance performed by designated depot maintenance activities using more extensive shop facilities, equipment, and personnel of higher technical skill than are available at lower levels of maintenance. Depot maintenance normally consists of inspection, test, repair, modification, alteration, modernization, conversion, and rebuilding of parts on assemblies, subassemblies, components, equipment end items, and weapons systems. It includes the manufacture of critical non-available parts and technical assistance to intermediate maintenance organizations, operational units and other activities. Depot maintenance work is

usually accomplished in fixed shops, shipyards and other shore based facilities, or by field teams.

DL1.1.8. Depot Maintenance Activity. An industrial-type facility established to perform depot-level maintenance on ships, aircraft, weapon systems, equipment and components.

DL1.1.9. Direct Labor Hours (DLH). Work performed solely for the benefit of a single job order. It is only incurred during the period of time that benefits accrue solely to that specific job order.

DL1.1.10. Direct Production Worker. A non-supervisory worker whose labor hours are normally charged to specific production work.

DL1.1.11. Excess Capacity. Capacity for which no current or future requirement exists.

DL1.1.12. Excess Capacity Index. An indicator of the capacity, expressed in DLH, which is available in a shop or depot, but not required to support funded workload requirements or provide essential core capabilities.

DL1.1.13. Index. A composite number used to characterize different sets of data. An index determined in accordance with this Handbook is a general indicator rather than a precise measure. Consequently, as index data are aggregated, their significance may decrease.

DL1.1.14. Indirect Labor Hours. All work performed that is not classified as direct.

DL1.1.15. Last Source of Repair. A depot activity designated to perform a specific type of work because there are no other sources available for the type of work concerned.

DL1.1.16. Mission Utilization Rate Index. An indicator, expressed as a percentage, of the degree of alignment between the required capacity index and the total capacity index of a shop or depot.

DL1.1.17. Peacetime Utilization Rate Index. An indicator, expressed as a percentage, of the degree of alignment between the utilized capacity index and the total capacity index of a shop or depot.

DL1.1.18. Product Mix. A combination of heterogeneous workloads usually related to major systems, subsystems, components, stock classes, or items.

DL1.1.19. Required Capacity Index. An indicator of the capacity, expressed in DLH, required by a shop or depot to support funded workload requirements AND provide essential core capabilities.

DL1.1.20. Reserve Capacity. Capacity at shop and depot levels that is not utilized but is retained for sound reasons of military necessity.

DL1.1.21. Reserve Capacity Index. An indicator of the capacity, expressed in DLH, required by a shop or depot to provide essential maintenance capabilities, but not actually utilized to support funded workload requirements as outlined in Chapter 3.

DL1.1.22. Shop. A work center, functional work group, or resource group that contains one or more work stations that perform depot maintenance work.

DL1.1.23. Surge. The act of expanding an existing depot maintenance repair capability to meet increased requirements by adjusting shifts, adding skilled personnel, equipment and/or spares and repair parts to increase the flow of repaired or manufactured materiel to using activities or for serviceable storage.

DL1.1.24. Total Capacity Index. The amount of workload, expressed in actual DLH, that a shop or depot can effectively utilize annually on a single shift, 40-hour week basis while producing the product mix that the shop or depot is designed to accommodate.

DL1.1.25. Utilization Index. An indicator, expressed as a percentage, of the degree of alignment of workload to the designed capacity of a shop or depot.

DL1.1.26. Utilized Capacity Index. An indicator of the capacity, expressed in DLH, required by a shop or depot to support funded workload requirements.

DL1.1.27. Workload. Peacetime maintenance support, expressed in DLH, by year (past years are actual DLH produced; current and future years are DLH projected to be produced), inclusive of funding from all sources (i.e., Operations and Maintenance (O&M), Procurement, and Research Development Testing and Evaluation (RDT&E) appropriations, stock fund, and reimbursables such as other Services and Foreign Military Sales).

DL1.1.28. Work Position. A designated amount of space and equipment that is occupied by a single direct production worker to accomplish assigned tasks on a full-time basis. A work position may include more than one location if the worker moves to other locations to accomplish the assigned tasks.

DL1.1.29. Work Station. The lowest order of equipment and/or process location that requires separate analysis of work flow and function during the capacity index calculation. It will consist of one or more work positions as determined by the criteria in step 2 of the capacity index calculation in this Handbook.

C1. CHAPTER 1

APPLICABILITY AND SCOPE

C1.1. PURPOSE AND APPLICATION

C1.1.1. REISSUANCE AND PURPOSE. This Handbook updates guidance for measurement of the capacity and utilization of DoD organic depot maintenance activities that perform depot-level maintenance of military materiel.

C1.1.2. APPLICABILITY AND SCOPE. This handbook is to be used by all activities and organizations of the DoD Components responsible for the determination and reporting of capacity and utilization information for organic depot maintenance activities.

C1.1.2.1. The techniques in this Handbook are applicable to both covered and uncovered spaces, as defined in Appendix 4., within the confines of the depot maintenance activity. This Handbook does not apply to depot field teams and shops referred to as general shop support in Appendix 4. Organic depot maintenance activities and physical capacities established or retained within the DoD Components are to be kept to the minimum necessary to ensure a ready, controlled source of technical competence and resources to meet military requirements (DoD Directive 4151.18, reference (a)). These activities, then, are to remain in place to provide logistical support for war, emergency, and contingency actions, and are to operate in peacetime in a cost-effective manner.

C1.1.2.2. In addition to prescribing calculation methodologies, this Handbook further establishes and outlines reporting criteria for the DoD Components. Such reporting is prescribed to monitor and support the establishment and retention of essential depot maintenance capability as outlined in DoD Directive 4151.18 (reference (a)).

C1.2. INDEXES AND COMPUTATIONS

C1.2.1. This Handbook provides a methodology to calculate depot maintenance capacity and utilization. It establishes DLH as the basic parameter of capacity, enabling comparisons of capacity and utilization data between activities producing varying product mixes. Expressing capacity in DLH provides an indication of relative size and levels of utilization. Also, shop-level data expressed in DLH can be

aggregated to develop higher-level indicators. All measurements and indicators are presented as indexes rather than precise numbers due to the inherent general nature of the calculations.

C1.2.2. Indexes are defined as composite numbers used to characterize different sets of data. Accordingly, indexes determined in accordance with this Handbook are general indicators rather than precise measures. As index data are aggregated, the significance of the data may decrease. While the indexes are important considerations in making workloading decisions, such decisions must be made as a result of a thorough, detailed analysis of the workloads, facilities, and resources involved.

C2. CHAPTER 2

STANDARD FACTORS

C2.1. COMPARABLE BASE

An objective of this Handbook is to provide methodologies for calculation of comparable data. Consequently, it is necessary that the DoD Components use similar factors as the basis of calculations. The Standard Factors identified in section C2.2., below, shall be used by the DoD Components to ensure comparable data is developed.

C2.2. CALCULATION FACTORS

C2.2.1. ANNUAL PAID HOURS (APHs). For determining annual productive hours, the annual paid DLH will be 2080 per work position.

C2.2.2. ANNUAL PRODUCTIVE HOURS. For capacity and utilization index calculations, the annual productive hours will be 1615 DLH per work position. The calculation of 1615 DLH annual productive hours is derived by using the following formula:

(2080 APHs - 80 hrs Holidays - 270 hrs Leave - 111 hrs Indirect = 1615 Annual Productive Hours)

C2.2.3. AVAILABILITY FACTOR. The percentage of a work year that work positions can be used to accomplish direct productive work is known as the availability factor, and it is expressed in decimal form. This factor includes reductions for facility and equipment non-availability for reasons such as calibration, maintenance, or repairs of real property and shop equipment, utility failure, adverse weather, and equipment installation or rearrangement. For depot capacity and utilization index calculations, the availability factor will be 0.95.

C2.2.4. BOTTLENECKS. Capacity for identified bottlenecks should also be calculated on a one shift basis. In managing depot shop operations, the DoD Components shall attempt to eliminate bottlenecks using standard industrial engineering procedures. Where this is not possible, bottlenecks, whether operated on a single- or multi-shift basis, should be used as pacing factors for structuring and workloading all affected shops.

C3. CHAPTER 3

CAPACITY

C3.1. TOTAL CAPACITY INDEX

C3.1.1. The Total Capacity Index indicates the amount of capacity, expressed in DLH, that a facility can effectively employ annually on a single shift, 40-hour week basis while producing the product mix that the facility is designed to accommodate. Individual shop level Total Capacity Indexes are calculated and then combined to determine the Total Capacity Index of an entire depot facility.

C3.1.2. The following steps outline procedures for calculating the Total Capacity Index at the shop level, to include Shipyard Output Shops (see Appendix 1.). The steps are illustrated in the flowchart at Appendix 2. The formula for Total Capacity Index is:

$$\begin{array}{ccc} \text{(work positions)} & \times & \text{(availability factor)} & \times & \text{(annual productive hours)} \\ & & (0.95) & & (1615) \end{array}$$

C3.1.2.1. Step 1. Obtain detailed shop layouts that identify the function of each shop, its boundaries, and its equipment and/or work bench locations. Verify and update the layouts to reflect the current product mix. If product mix changes are expected to result in shop reconfiguration(s) during the fiscal year, drawings should be obtained for each specific configuration. In cases where a shop has a fluctuating multi-commodity product mix, it may not be practical to address every possible product mix and a representative shop layout may be used.

C3.1.2.2. Step 2. Determine and identify on the layouts the number of work stations and the work positions in each station. Calculate the number of work positions for each work station. To obtain the number of work positions in the shop, add the totals for the work stations within the shop. Work positions will be identified by the following rationale:

C3.1.2.2.1. If only one person would operate the equipment and/or process, the work station will include the equipment and/or process and be recorded as one work position. Examples are: a work station of several pieces of robotic equipment operated station of several pieces of computer-aided manufacturing equipment operated by one person; and a tire recapping machine operated by one person. In these instances, although the number of pieces of equipment varies from

example to example, there is only one work position because in each case, the work position is operated by one person.

C3.1.2.2.2. If the work station is designed to be operated by more than one person, one work position will be recorded for each person. Examples are engine test cells and radar ranges that are operated by more than one person. In each case, the number of work positions is the maximum number of people by which the work station is designed to be operated.

C3.1.2.2.3. If, under design conditions, a piece of equipment would only be infrequently used, or would support more than one work station, it will not be counted as an individual work position, but will be included in a designated work station and labeled support equipment. Examples are machine shop support equipment, such as lathes and drill presses, that support multiple work stations.

C3.1.2.2.4. If an equipment and /or process is designed to be frequently but not continuously used, it should be included as part of a related work position.

C3.1.2.2.5. For the stall and/or work bay and/or aircraft dock situation, determine the optimum number of people who can effectively work during each phase of the process cycle. The weighted average over the cycle will equal the work position quantity of the work station. An analysis of the product mix and process variations may be necessary to determine this value based on experience and knowledge of the processes involved.

C3.1.2.2.6. Bulk processing work stations, such as plating, chemical cleaning, and heat treating shops, can be regarded as one work station. The work position count of these stations is the number of persons necessary to effectively man the entire work station.

C3.1.2.2.7. If a position is designed to be manned continuously, but is currently vacant because of reduced workload quantity, it shall be counted as a work position.

C3.1.2.2.8. For uncovered areas in which depot maintenance is routinely performed year round on a parked vehicle, such as an aircraft parking apron, the number of work positions is calculated in the same manner as in subparagraph C3.1.2.2.5., above. For uncovered areas in which equipment has been permanently installed, the number of work positions will be determined based on the criteria in subparagraphs C3.1.2.2.1. through C3.1.2.2.7., above.

C3.1.2.2.9. It is recognized that a shop may be reconfigured during the year to accommodate variations in product mix. When this condition exists, the number of work positions for each configuration should be multiplied by the estimated percent of time during the year that the specific configuration will be in place. An analysis of the product mix and process variations may be necessary to determine this value based on experience and knowledge of the processes involved. The resulting products for the different configurations should be added together to arrive at the annual weighted work position count for that shop.

C3.1.2.2.10. Record the number of work positions. When identifying work positions for a future fiscal year, the impact of projected work position changes resulting from programmed Military Construction (MILCON) projects, shop reconfigurations, divestitures, changes in product mix, etc., must be taken into account.

C3.1.2.3. Step 3. Multiply the result of Step 2 above by the Availability Factor (0.95).

C3.1.2.4. Step 4. Multiply the product of Step 3 above by the applicable annual productive hour rate (1615 DLH).

C3.1.2.5. Step 5. Record the shop capacity index and assign a production of shop category to the shop (see Appendix 4.).

C3.2. UTILIZED CAPACITY INDEX

The Utilized Capacity Index is an indicator of the capacity, expressed in DLH, required by a shop or depot to support funded workload requirements. It is equal to the total number of DLH required for a shop or depot to execute funded workload requirements on an annual basis, and may include capacity used to perform non-core work as necessary to satisfy statutory requirements, best value, and last source of repair.

C3.3. CORE CAPACITY INDEX

The Core Capacity Index is an indicator of the capacity, expressed in DLH, required for a shop or depot to provide essential maintenance capabilities as calculated in accordance with the approved DoD core. This includes both core capability that is used and core capability that is held in reserve (described in section C3.4., below).

C3.4. RESERVE CAPACITY INDEX

The Reserve Capacity Index is an indicator of the capacity, expressed in DLH, required by a shop or depot to provide essential maintenance capabilities. It is equal to the total number of core DLH that are NOT being used but are required to support DoD core maintenance requirements computed using the DoD-approved methodology. Reserve capacity is not considered excess capacity. Reserve capacity should be specifically identified at the shop level. Specific rationale for retention of reserve capacity shall be developed by the activity concerned and approved by the respective DoD Component.

C3.5. REQUIRED CAPACITY INDEX

The Required Capacity Index is an indicator of the capacity, expressed in DLH, required by as shop or depot to support funded workload requirements AND provide essential core capabilities. It is calculated by adding the Utilize Capacity Index to the Reserve Capacity Index.

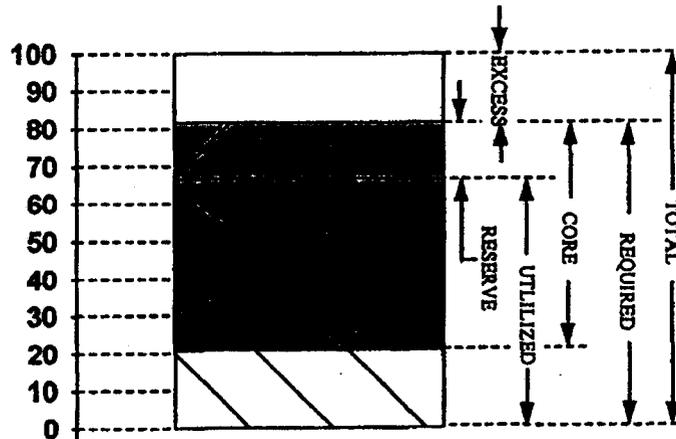
C3.6. EXCESS CAPACITY INDEX

The Excess Capacity Index is an indicator of the capacity, expressed in DLH, that is available in a shop or depot, but for which no requirement exists. It is calculated by subtracting the Required Capacity Index from the Total Capacity Index for the shop or depot concerned. In assessing or reducing excess capacity extreme caution must be exercised. There are cases where a work position will not be fully used, and this unused capacity can not be removed without eliminating the ability to accomplish the workload. As long as there exists a requirement to accomplish a workload, the minimum number of whole work positions must be retained.

C3.7. CAPACITY INDEXES RELATIONSHIPS

The following is an example showing the pictorial relationship of the capacity indexes.

CAPACITY INDEXES IN DIRECT LABOR HOURS (DLH)



TOTAL CAPACITY INDEX = 100.0
UTILIZED CAPACITY INDEX = 66.7
CORE CAPACITY INDEX = 60.7
RESERVE CAPACITY INDEX = 15.0

REQUIRED CAPACITY INDEX = 66.7 + 15.0 = 81.7
EXCESS CAPACITY INDEX = 100.0 - 81.7 = 18.3

C3.8. NAVAL SHIPYARD CAPACITY INDEXES

C3.8.1. Ship depot maintenance is unique among various DoD depot sectors. Therefore, counting of work positions onboard ship is impractical. The total productive capacity of a naval shipyard is the sum of the capacity index data for Naval Shipyard output shops, as calculated using the procedures outlined in subsection C3.1.2. of this chapter, for the Total Capacity Index at the shop level, and the Drydock Capacity Index data reflected in subsection C3.8.3., below.

C3.8.2. The preponderance of ship depot maintenance is accomplished on ship availabilities that require drydocking (i.e., these availabilities have the largest work packages). The best measurement of shipyard's overall capacity is a combination of Drydock Capacity, or throughput (to capture all ship work), and output shoplevel capacity (to capture the repairables work).

C3.8.3. The Drydock Capacity Index is to be determined by first calculating the maximum ship maintenance capacity for each drydock in each shipyard. For each usable (certified) drydock in a shipyard, the type of assigned ship availability with the largest workload that can be performed in each drydock is identified (e.g., CVNs

loaded into carrier docks). It will be assumed that the drydock will be continually utilized, less the days necessary to maintain the drydock in a full, certified condition, for that type of availability (i.e., as soon as the drydock phase of one availability is complete, the ship is undocked and the next ship docking block workup will commence and then the next ship will be docked); drydock work commences on the second ship while the first ship's availability is completed pierside. The days of programmed annual maintenance for all drydocks are to be subtracted from the maximum days available when computing drydock capacity. The total workload represents all work for an availability, including the drydock phase, the pierside phase and availability related output shop portion. This will be identified in DLH.

C3.8.4. This total is defined as the Drydock Capacity Index and represents the capacity of the shipyard for stapwork when every usable drydock is utilized fully with the largest ship availability type possible.

C3.8.5. The shipyard Total Capacity Index will be computed by adding the Drydock Capacity Index and Shop Level Capacity Index that applies to the output shops.

C4. CHAPTER 4

UTILIZATION INDICATORS

C4.1. UTILIZATION INDEX

The Utilization Index is an indicator, expressed as a percentage, of the degree of alignment between the Utilized Capacity Index or Required Capacity Index and the Total Capacity Index of a shop or depot. Specific Utilization Indexes are calculated for the categories in sections C4.2. and C4.3., below.

C4.2. PEACETIME UTILIZATION INDEX

The Peacetime Utilization Index is an indicator, expressed as a percentage, of the degree of alignment between the Utilized Capacity Index and the Total Capacity Index of a shop or depot. The formula for the Peacetime Utilization Index is:

$$\frac{\text{Utilized Capacity Index}}{\text{Total Capacity Index}} \times 100 = \underline{\hspace{2cm}} \%$$

The Peacetime Utilization Index will be computed for each depot for the most recent prior year, current year, and 3 planning years. It may also be computed for prior years and the Future Years Defense Program (FYDP) out years.

C4.3. MISSION UTILIZATION INDEX

The Mission Utilization Index is an indicator, expressed as a percentage, of the degree of alignment between the Required Capacity Index and the Total Capacity Index of a shop or depot. The Mission Utilization Index will be computed for each depot for applicable planning year(s) using the following formula:

$$\frac{\text{Required Capacity Index}}{\text{Total Capacity Index}} \times 100 = \underline{\hspace{2cm}} \%$$

C5. CHAPTER 5

INFORMATION REQUIREMENTS

C5.1. RECORDS

The DoD Components shall identify the level and location for retention of records regarding capacity and utilization data. As a minimum, the following records should be maintained for review and validation of capacity and utilization determination:

C5.1.1. Shop drawings for each shop configuration designating work positions, work station locations, and support equipment.

C5.1.2. Capacity index calculations, including depot level capacity index data sorted by production shop category.

C5.1.3. Identification and classification of reserve capacity along with supporting justification.

C5.1.4. Identification of excess capacity.

C5.1.5. Utilization calculation results as shown in Appendix 3.

C5.1.6. A depot summary of current capacity index and utilization index data in the Appendix 3. format.

C5.2. REPORTING REQUIREMENTS

The reporting requirements defined in this section are designed to provide the Department of Defense with capacity and utilization data on organic depot maintenance activities. Each activity is required to determine the capacity and utilization data using this Handbook, and report this data to the respective DoD Components.

C5.2.1. Each DoD Component shall maintain, in a central location, the data reported under this section in the format defined in Appendix 3. A hard copy report in that format shall be submitted for each depot activity to the Deputy Under Secretary of Defense for Logistics, Attention: Assistant Deputy Under Secretary of Defense for Maintenance Policy, Programs and Resources, within 90 days after the end of each fiscal year. This annual DoD internal reporting requirement has been assigned Report

Control Symbol DD-A&T(A)2008 in accordance with DoD 8910.1-M (reference (b)).

C5.2.2. Capacity data reporting systems shall be designed to provide an audit trail from the depot maintenance activity fiscal year end report to the shop capacity records and data.

C5.2.3. As an integral part of the edit process on the report, a review shall be performed by maintenance or logistics experts to determine the accuracy, completeness, and reasonableness of the data being submitted. The report shall include a narrative analysis of significant changes, developments, information, or trends portrayed by the report. The transmittal memorandum for the report shall identify a point of contact for issues and questions relating to the data being reported.

C5.2.4. Any one-time or additional reports required shall be prescribed by the Office of the Deputy Under Secretary of Defense for Logistics.

C5.2.5. Reporting shall cover a period of the most recent actual (completed) fiscal year, the current (operating and/or budget) year and one planning year. Data for the planning year should reflect the impact of projected capacity changes resulting from programmed MILCON projects, shop reconfigurations, divestitures, changes in product mix, and other related factors. Significant changes should be addressed in the Comments Section of the report. Specific plans for excess capacity should also be addressed.

AP1. APPENDIX 1
NAVAL SHIPYARD OUTPUT SHOPS

AP1.1.1. Electronics

AP1.1.2. Machine Shop (Inside)

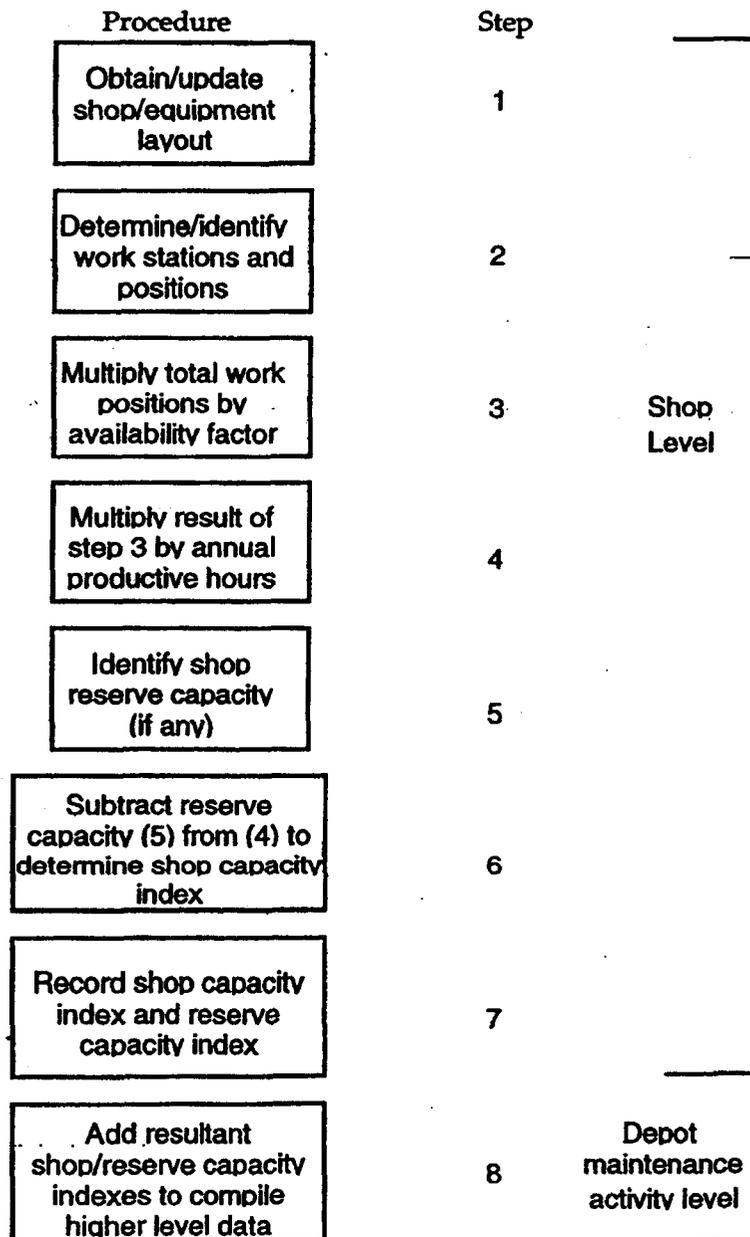
AP1.1.3. Foundry

AP1.1.4. Forge

AP1.1.5. Repairable Work

AP2. APPENDIX 2

CAPACITY INDEX DETERMINATION FLOW CHART



AP3. APPENDIX 3

DD FORM 2748, "DEPOT CAPACITY AND/OR UTILIZATION SUMMARY SHEET"

DEPOT CAPACITY AND/OR UTILIZATION SUMMARY SHEET		REPORT CONTROL SYMBOL			
1. AS OF					
LOCATION	DOD FISCAL YEARS				
	PAST ACTUAL a.	CURRENT YEAR b.	PLAN YEAR 1 c.	PLAN YEAR 2 d.	PLAN YEAR 3 e.
2. TOTAL DEPOT CAPACITY INDEX (DLH)					
3. UTILIZED CAPACITY INDEX (DLH)					
4. CORE CAPACITY INDEX (DLH)					
5. RESERVE CAPACITY INDEX (DLH)					
6. REQUIRED CAPACITY INDEX (DLH)					
7. EXCESS CAPACITY INDEX (DLH)					
8. PEACETIME UTILIZATION RATE (%)					
9. MISSION UTILIZATION RATE (%)					
NOTE: Capacity data for planning years should reflect the impact of projected capacity changes resulting from programmed MILCON projects, shop reconfigurations, divestitures, changes in product mix, etc.					

DD FORM 2748, DEC 1996

LOCAL REPRODUCTION AUTHORIZED.

AP4. APPENDIX 4

PRODUCTION SHOP CATEGORIES

AP4.1. Aircraft Airframes

AP4.1.1. Airframe. Covered and uncovered areas associated with processing the airframe under these programs commonly identified as progressive aircraft rework, inspect repair as necessary (IRAN), maintenance, crash damage repair and/or overhaul, modernization, modification, etc. The work functions include stripping, disassembly, airframe repair, reassemble, systems check, and refinishing.

AP4.1.2. Other. Those areas used to perform productive work that are not included in category AP4.1.1., above. Includes work performed away from production facility by field teams.

AP4.1.3. General Shop Support. Those covered or uncovered spaces that are second in providing general support to all aircraft production operations. General support includes functions, such as management, supervision, engineering, clerical functions, plant maintenance, central or general storage, quality assurance, and materials testing. This category includes offices, cafeterias, supervisors' work space, shop parts storage areas, main aisles, wash and dressing areas, dispatching facilities, inspection facilities, etc., that are an integral part of shop areas defined in categories AP4.1.1. and AP4.1.2., above.

AP4.2. Aircraft Components

AP4.2.1. Components. Covered and uncovered areas associated with processing airframe accessories, such as the following:

AP4.2.1.1. Dynamic Components. AH aircraft moving components, such as transmissions, propeller shafts, etc., not otherwise classified.

AP4.2.1.2. Aircraft Structures. Airframe skin, spars, stiffeners, etc., that make up the skeleton and outer shell of the aircraft.

AP4.2.1.3. Hydraulic and/or Pneumatic. Fluid and air pumps and associated plumbing lines and components, air-driven accessories, ram air turbines, fluid-driven accessories, etc. (also includes pneudraulics).

AP4.2.1.4. **Instruments.** Indicators or measurement devices such as pressure, temperature and humidity gages; air speed, direction, and other flight control instruments; etc.

AP4.2.1.5. **Landing Gear.** Wheels, strut assemblies, tires, brakes, etc.

AP4.2.1.6. **Aviation Ordnance.** Delivery systems, such as bomb racks, missile racks and launchers, guns, etc.

AP4.2.1.7. **Avionics and/or Electronics.** Electronic equipment, such as radar systems, radios, on-board computers, etc.

AP4.2.1.8. **APUs (Auxiliary Power Units).** On-board systems, not powered by aircraft primary sources, used to supply electrical, hydraulic, or air power for short or temporary periods, such as starting, heating crew and passenger compartments, or emergencies.

AP4.2.2. **Repair.** Covered and uncovered areas that are not an integral part of other categories previously prescribed, and that contribute to aircraft repair operations by such work functions as parts cleaning; painting and plating; parachute, ordnance, photographic, leather, and fabric repair; machine and metal repair; etc.

AP4.2.3. **Other.** Those areas used to perform productive work that are not included in categories AP4.2.1. through AP4.2.2., above. Includes work performed away from facility by field teams, etc.

AP4.2.4. **General Shop Support.** Those covered or uncovered spaces that are second in providing general support to all aircraft production operations. General support includes functions, such as management, supervision, engineering, clerical functions, plant maintenance, central or general storage, quality assurance, and materials testing. This category includes offices, cafeterias, supervisors' work space, shop parts storage areas, main aisles, wash and dressing areas, dispatching facilities, inspection facilities, etc., that are an integral part of shop areas defined in categories AP4.2.1. through AP4.2.3., above.

AP4.3. **Engines (Gas Turbine)**

AP4.3.1. **Engines.** Covered and uncovered areas associated with processing aircraft, ship and tank gas turbine engines and components (other than blades and

vanes) in terms of overhaul, low time, complete repair, and major inspection. The work functions include uncanning, disassembly, cleaning, metals examination, examination and evaluation, parts reconditioning, subassembly, final assembly, test and preservation.

AP4.3.2. Gas Turbine Engines Blades and Vanes. Covered and uncovered areas used with processing gas turbine engine blades and vanes.

AP4.3.3. Repair. Covered and uncovered areas that are not an integral part of other categories previously prescribed, and that contribute to gas turbine engine repair operations by such work functions as parts cleaning, plating, and machine and metal repair.

AP4.3.4. Other. Those areas used to perform productive work that are not included in categories AP4.3.1. through AP4.3.3., above. Includes work performed away from production facility by field teams.

AP4.3.5. General Shop Support. Those covered and uncovered spaces that are used in providing general support to all gas turbine engine production operations. General support includes functions such as management, supervision, engineering, clerical functions, plant maintenance, central or general storage, quality assurance, and materials testing. This category includes offices, cafeterias, supervisors work space, shop parts storage areas, main aisles, wash and dressing areas, dispatching facilities, inspection facilities, etc., that are an integral part of shop areas defined in categories AP4.3.1. through AP4.3.4., above.

AP4.4. Missiles and Missile Components

AP4.4.1. Strategic Missiles. Covered and uncovered areas associated with processing the strategic missile frames, motors, guidance systems and components, payload systems, accessories and components, and launch equipment.

AP4.4.2. Tactical Missiles. Covered and uncovered areas associated with processing tactical missile frames, solid or liquid propellant, major inspection and modification. The work functions include disassembling, cleaning, propellant examination and evaluation, parts reconditioning, subassembly, final assembly, test and calibration.

AP4.4.3. Repair. Covered and uncovered areas that are not an integral part of other categories previously prescribed, and that contribute to missile repair operations by such work functions as parts cleaning, painting, machine and metal repair, etc.

AP4.4.4. Other. Those areas used to perform productive work that are not included in categories AP4.4.1. through AP4.4.3. above. These include work performed on site by field teams, etc.

AP4.4.5. General Shop Support. Those covered and uncovered spaces that are used in providing general support to missile production operations. General support includes functions, such as management, supervision, engineering, clerical functions, planet maintenance, central or general storage, quality assurance, and materials testing. This category includes offices, cafeterias, supervisors' work space, shop parts storage areas, main aisles, wash and dressing areas, dispatching facilities, inspection facilities, etc., that are an-integral part of shop areas defined in categories AP4.4.1. through AP4.4.4., above.

AP4.5. Amphibians

AP4.5.1. Vehicles. Covered and uncovered areas used for depot maintenance of complete amphibians. Work functions include repair, overhaul, rebuild, cleaning, disassembly, reassembly, refinishing, systems check, etc.

AP4.5.2. Components. Covered and uncovered areas used for depot maintenance of amphibian hull and/or body, frame-installed systems and power train accessories, and components. Also includes accessories and components of internal combustion engines and armament systems.

AP4.5.3. Repair. Covered and uncovered areas that are not an integral part of other categories previously prescribed, and that contribute to the vehicle repair operations by such work functions as parts cleaning, leather and fabric repair, machine and metal repair, etc.

AP4.5.4. Other. Those areas used to perform productive work that are not included in categories AP4.5.1. through AP4.5.4., above. Includes work performed away from production facility by field teams etc.

AP4.5.5. General Shop Support. Those covered and uncovered spaces that are used in providing general support to amphibian production operations. General

support includes functions such as management, supervision, engineering, clerical functions, plant maintenance, central or general storage, quality assurance, and materials testing. This category includes offices, cafeterias, supervisors' work space, shop parts storage areas, main aisles, wash and dressing areas, dispatching facilities, inspection facilities, etc., that are an integral part of shop areas defined in categories AP4.5.1. through AP4.5.4., above.

AP4.6. Ground Combat Vehicles

AP4.6.1. Self-propelled. Covered and uncovered areas used for depot maintenance of complete self-propelled artillery vehicles. Work functions include repair, overhaul, rebuild, cleaning, disassembly, reassembly, refinishing, systems check, etc.

AP4.6.2. Tanks. Covered and uncovered areas used for depot maintenance of tanks. Work functions include repair, overhaul, rebuild, cleaning, disassembly, reassembly, systems check, etc.

AP4.6.3. Towed Combat Vehicles. Covered and uncovered areas used for depot maintenance of towed combat vehicles. Work functions include repair, overhaul, rebuild, cleaning, disassembly, reassembly, refinishing, systems check, etc.

AP4.6.4. Components. Covered and uncovered areas used for depot maintenance of combat vehicle hull and/or body, frame, installed systems and power train accessories components. Also includes accessories and components of internal combustion engines and armament systems.

AP4.6.5. Repair. Covered and uncovered areas that are not an integral part of other categories previously prescribed, and that contribute to combat vehicle repair operations by such work functions as parts cleaning, painting and plating, parachute, ordnance, photographic, leather and fabric repair, machine and metal repair, etc.

AP4.6.6. Other. Those areas used to perform productive work that are not included in categories AP4.6.1. through AP4.6.5., above. Includes work performed away from facility by field teams, etc.

AP4.6.7. General Shop Support. Those covered and uncovered spaces that are used in providing general support to combat vehicle production operations. General support includes functions, such as management, supervision, engineering, clerical functions, plant maintenance, central or general storage, quality assurance, and

materials testing. This category includes offices, cafeterias, supervisors' workspace, shop parts storage areas, main aisles, wash and dressing areas, dispatching facilities, inspection facilities, etc., that are an integral part of shop areas defined in categories AP4.6.1. through AP4.6.6., above.

AP4.7. Ground and Shipboard Communications and Electronic Equipment

AP4.7.1. Radio. Covered and uncovered areas associated with processing radio equipment for overhaul, repair, conversion, and modification that are required in support of fixed, mobile, and portable electronic and communications systems. Categories of equipment include communication, control, navigation, auxiliary, relay, microwave, television, and radiological. Work functions include disassembly, inspection, cleaning, repair, parts reconditioning and/or replacement, manufacture, calibration, reassembly and test.

AP4.7.2. Radar. Covered and uncovered areas associated with processing radar equipment for overhaul, repair, conversion, and modification that are required in support of fixed, mobile, and portable electronic and communication systems. Radar equipment categories include navigation, search, surveillance, height finding and identification. Work functions include disassembly, inspection, cleaning, repair, parts reconditioning and/or replacement, manufacture, calibration, reassembly, test and alignment.

AP4.7.3. Wire and Communications. Covered and uncovered areas associated with processing wire and communications equipment for overhaul, repair, conversion, rehabilitation and modification that are required in support of fixed, mobile, and portable electronic and communication systems. Wire and Communications categories of equipment include teletype, facsimile, telephone and telegraph, intercom and public address systems, sound recording and reproduction, visible and invisible light communication, and cryptological.

AP4.7.4. Electronic Warfare. Covered and uncovered areas associated with processing electronic warfare equipment.

AP4.7.5. Navigational Aids. Covered and uncovered areas associated with processing of navigational aids.

AP4.7.6. Electro-Optics and/or Night Vision. Covered and uncovered areas associated with processing of electro-optics and night vision equipment.

AP4.7.7. Satellite Control and/or Space Sensors. Covered and uncovered areas associated with processing of satellite control and space sensor equipment.

AP4.7.8. Crypto. Covered and uncovered areas associated with processing of crypto equipment.

AP4.7.9. Other (including computers). Covered and uncovered areas to perform depot maintenance on other types of communications-electronics equipment, including computers. Also includes work performed away from production facility by field teams.

AP4.7.10. Repair. Covered and uncovered areas that are not an integral part of other categories previously prescribed, and that contribute to communications-electronics equipment repair operations by such work functions as painting, plating, cleaning, welding, machine shop operations, metal and woodworking, canvas and upholstery repair, and plastic, graphic arts and other repair efforts, associated with the electronic and communications equipment.

AP4.7.11. General Shop Support. Those covered and uncovered spaces that are used in providing general support to electronics and communications production operations. General support includes functions such as management, supervision, engineering, clerical functions, plant maintenance, central or general storage, quality assurance and materials testing. This category includes offices, cafeterias, supervisors' work space, shop parts storage areas, main aisles, wash and dressing areas, dispatching facilities, inspection facilities, etc., that are an integral part of shop areas defined in categories AP4.7.1. through AP4.7.10., above.

AP4.8. Automotive and/or Construction Equipment

AP4.8.1. Vehicles and Components. Covered and uncovered areas used for depot maintenance of complete automotive and/or construction vehicles and their components (less communications-electronics). Work functions include repair, overhaul, rebuild, cleaning, disassembly, reassembly, refinishing, systems check, etc.

AP4.8.2. Repair. Covered and uncovered areas that are not an integral part of other categories previously prescribed, and that contribute to the vehicle repair operation by such work functions as parts cleaning, painting and plating, leather and fabric repair, machine and metal repair, etc.

AP4.8.3. Other. Those areas used to perform productive work that are not included in categories AP4.8.1. and AP4.8.2., above. Includes work performed away from the production facility by field teams.

AP4.8.4. General Shop Support. Those covered and uncovered areas that are used in providing general support to all vehicle production operations. General support includes such functions as management, supervision, engineering, production control, clerical functions, plant maintenance, central or general storage, quality assurance, and materials testing, etc. This category include offices, cafeterias, libraries, supervisors' workspace, shop parts storage areas, main aisles, wash and dressing areas, dispatching facilities, inspection facility, etc., that are an integral part of shop areas defined in categories AP4.8.1. through AP4.8.3., above.

AP4.9. Tactical Vehicles

AP4.9.1. Tactical Automotive Vehicles. Covered and uncovered areas for depot maintenance of complete tactical automotive vehicles. Work functions include repair, overhaul, rebuild, cleaning, disassembly, reassembly, refinishing, systems check, etc.

AP4.9.2. Components. Covered and uncovered areas for depot maintenance of hull and/or body, frame, installed systems, power train accessories, and components. Also includes accessories and components of engines and armament systems.

AP4.9.3. Repair. Covered and uncovered areas that are not an integral part of other categories previously prescribed, and that contribute to vehicle equipment repair operation by such work functions as parts cleaning, painting, plating, leather and fabric repair, machine and metal repair, etc.

AP4.9.4. Other. Those areas used to perform productive work that are not included in categories AP4.9.1. through AP4.9.3., above. Includes work performed away from the production facility by field teams.

AP4.9.5. General Shop Support. Those covered and uncovered areas that are used in providing general support to tactical vehicle production operations. General support includes such functions as management, supervision, engineering, production control, clerical functions, plant maintenance central or general storage, quality assurance, and materials testing, etc. This category includes offices, cafeterias, libraries, supervisors' work space, shop parts storage areas, main aisles, wash and

dressing areas, dispatching facilities, inspection facilities, etc., that are an integral part of shop areas defined in categories AP4.9.1. through A4.9.4., above.

AP4.10. Ground General Purpose

AP4.10.1. Ground Support Equipment. Covered and uncovered areas associated with depot maintenance of ground support equipment (except aircraft and communications-electronics) and its accessories and components.

AP4.10.2. Ground Generators. Covered and uncovered areas associated with the depot maintenance of ground generators and their accessories and components.

AP4.10.3. Repair. Covered and uncovered areas that are not an integral part of other categories previously prescribed, and that contribute to ground general purpose repair operations, by such work functions as painting and plating, machine and metal repair, etc.

AP4.10.4. Other. Those areas used to perform productive work that are not included in categories AP4.10.1. through AP4.10.3., above. Includes work performed away from the production facility by field teams.

AP4.10.5. General Shop Support. Those covered and uncovered areas that are used in providing general support to all ground general purpose equipment production operations. General support includes functions as management supervision, engineering, production control, clerical functions, plant maintenance, central or general storage, quality assurance, and materials testing, etc. This category includes offices, cafeterias, libraries, supervisors' work space, shop parts storage areas, main aisles, wash and dressing areas, dispatching facilities, inspection facilities, etc., that are an integral part of shop areas defined in categories AP4.10.1. through AP4.10.4., above.

AP4.11. Ordnance, Weapons, and Munitions

AP4.11.1. Nuclear Weapons. Covered and uncovered areas associated with renovation, modification, repair, inspection, test, assembly, and demilitarization of nuclear weapon materiel.

AP4.11.2. Chemical and Bacteriological. Covered and uncovered areas associated with renovation, modification, repair, inspection, test, assembly and demilitarization of chemical and bacteriological weapons, and associated materiel.

AP4.11.3. Conventional Arms and Explosives. Covered and uncovered areas associated with renovation, modification, repair, inspection, test, assembly and demilitarization of all items of conventional, ammunition and explosives, including bombs, grenades, weapon warheads, rockets, mines, torpedoes, pyrotechnics, fuses, primers, etc.

AP4.11.4. Small Arms. Covered and uncovered areas associated with modification, repair, inspection, test, assembly, and demilitarization of small arms, including all hand-held weapons, bayonets, and associated materiel.

AP4.11.5. Repair. Covered and uncovered areas that are not an integral part of other categories previously prescribed, and that contribute to ordnance, weapons and munitions repair operations by such work functions as painting and plating, and machine and metal repair, etc.

AP4.11.6. Other. Those areas used to perform productive work that are not included in categories AP4.11.1. through AP4.11.5., above. Includes work performed away from the production facility by field teams.

AP4.11.7. General Shop Support. Those covered and uncovered areas that are used in production operations. General support includes functions as management supervision, engineering, production control, clerical functions, plant maintenance, central or general storage, quality assurance, and materials testing, etc. This category includes offices, cafeterias, libraries, supervisors' work space, shop parts storage areas, main aisles, wash and dressing areas, dispatching facilities, inspection facilities, etc., that are an integral part of shop areas defined in categories AP4.11.1. through AP4.11.6., above.

AP4.12. Sea Systems

AP4.12.1. Ships. Covered and uncovered areas associated with the following: central tool shop, shipfitting, sheet metal, forge and heat treating, welding, inside machining, marine machining, boilermaking, electrical, pipefitting, woodworking, painting and blasting, riggings, foundry, pattern making, and temporary services.

AP4.12.2. Weapons. Covered and uncovered areas associated with the repair, overhaul, alignment, installation, checkout and test of all weapons systems and integrated systems (gun mounts, turrets, saluting batteries, and launching pads). Work functions include repair overhaul and testing of gunsights, range finders, torpedo

directors, telescopic sights, periscopes, binoculars, stereo trainers, and other miscellaneous repair of instruments, etc.

AP4.13. Software

AP4.13.1. Tactical Systems. Covered and uncovered areas used for depot maintenance of tactical systems software.

AP4.13.2. Support Equipment. Covered and uncovered areas used for depot maintenance of support equipment software.

AP4.13.3. General Support. Those covered and uncovered areas that are used in production operations. General support includes functions as management supervision, engineering, production control, clerical functions, plant maintenance, central or general storage, quality assurance, materials testing, etc. This category includes offices, cafeterias, libraries, supervisors' work space, shop parts storage areas, main aisles, wash and dressing areas, dispatching facilities, inspection facilities, etc., that are an integral part of shop areas defined in categories AP4.13.1. and AP4.13.2., above.

AP4.14. Special Interest Items

AP4.14.1. Bearings Refurbishment. Covered and uncovered areas used for depot maintenance of all types of bearings.

AP4.14.2. Calibration (Type 1). Covered and uncovered areas used to perform Type 1 calibration on all types of equipment.

AP4.14.3. Test Measurement and Diagnostic Equipment (TMDE). Covered and uncovered areas used for depot maintenance of TMDE equipment.

AP4.14.4. Repair. Covered and uncovered areas that are not an integral part of other categories previously prescribed, and that contribute to special interest item repair operations by such work functions as painting and plating, rubber products fabrication, machine and metal repair, etc.

AP4.14.5. Other. Those areas used to perform productive work that are not included in categories AP4.14.1. through AP4.14.4., above. Includes work performed in other than covered areas and that are performed away from the production facility by field teams.

AP4.14.6. General Shop Support. Those covered and uncovered areas that are used in production operations. General support includes functions as management supervision, engineering, production control, clerical functions, plant maintenance, central or general storage, quality assurance, materials testing, etc. This category includes offices, cafeterias, libraries, supervisors' work space, shop parts storage areas, main aisles, wash and dressing areas, dispatching facilities, inspection facilities, etc., that are an integral part of shop areas defined in categories AP4.14.1. through AP4.14.5., above.

AP4.15. Other

AP4.15.1. Other Items. Covered and uncovered areas used for depot maintenance of items not identified in categories AP4.1. through AP4.14., above.

AP4.15.2. Repair. Covered and uncovered areas that are not an integral part of other categories previously prescribed, and that contribute to repair operations by such work functions as painting and plating, and machine and metal repair.

AP4.15.3. Other. Those areas used to perform productive work that are not included in categories AP4.15.1. through AP4.15.2., above. Includes work performed away from the production facility by field teams.

AP4.15.4. General Shop Support. Those covered and uncovered areas that are used in production operations. General support includes functions as management supervision, engineering, production control, clerical functions, plant maintenance, central or general storage, quality assurance, materials testing, etc. This category includes offices, cafeterias, libraries, supervisors' work space, shop parts storage areas, main aisles, wash and dressing areas, dispatching facilities, inspection facilities, etc., that are an integral part of shop areas defined in categories AP4.15.1. through AP4.15.3., above.

AP4.16. Associated Fabrication and/or Manufacturing

Covered and uncovered areas associated with fabrication and/or manufacturing in support of depot maintenance of the items in categories AP4.1. through AP4.15., above.



COMMITTED TO
INSTALLATION EXCELLENCE

Kevin

Liz

See Attached Response. This
fills out some holes in our
data for ANALYSIS.

I will give to Gen Hill in
Atlanta.

Gray



DEPARTMENT OF THE ARMY
OFFICE OF THE ASSISTANT SECRETARY
INSTALLATIONS AND ENVIRONMENT
110 ARMY PENTAGON
WASHINGTON DC 20310-0110

JUN 28 2005

General James T. Hill (USA Ret)
Commissioner
2005 Defense Base Realignment and Closure Commission
2521 South Clark Street, Suite 600
Arlington, VA 22202

Dear General Hill:

I am responding to your request for additional information as discussed during our recent phone conversation on 21 June 2005. The paragraphs below and the attached briefing charts provide more detailed information on the Base Realignment and Closure (BRAC) recommendations for Texas.

As discussed during the basing testimony on 18 May 2005, the Army used BRAC 2005 to conduct a holistic review of our operational basing, to include the impact of units returning from overseas and activation of modular units. Through the BRAC process, the Army sought to balance its operational forces across a variety of installations and provide them with sufficient, sustainable maneuver and training space in a wide variety of geographic, topographic, and climatic conditions in support of the live training requirements of units assigned. The BRAC analysis concluded that with five BCTs permanently stationed at Fort Hood, Fort Hood is at its saturation point from a training perspective. Fort Bliss still has excess capacity with four BCTs, while Fort Carson is at capacity with four.

FORT HOOD

- Analysis concluded that Fort Hood is at its saturation point, from a training perspective, with 5 BCTs.
- Facilities for a sixth BCT do not exist at Fort Hood nor is the military construction currently programmed.
- Estimated current facilities shortages at Fort Hood will require additional military construction to support the transformation of the 5 BCTs and other units remaining at Fort Hood to the new modular force design.
- The projected FY 11 Fort Hood soldier population will be more than 41,700 after all BRAC and modular force transformation actions are considered. The FY 03 soldier population, the baseline for analysis, was 41,054.
- As our force structure decisions continue to evolve, Fort Hood may grow. In any case, Fort Hood will remain the Army's premier heavy maneuver force installation, with more maneuver brigades than any other installation.

FORT BLISS

- One of the Army's largest installations.
- Combined with White Sands Missile Range, this is the largest maneuver training and testing location within the Army.
- With the increase in number of BCTs stationed in the United States, consolidating the ADA and Field Artillery Centers and Schools at Fort Sill provides the required space at Fort Bliss to adequately train four of these BCTs, while providing additional capacity for future requirements.
- There is no other location that provides these same attributes as effectively and efficiently.

RED RIVER ARMY DEPOT

The Industrial JCSG developed recommendations to relocate the Depot Maintenance and the Munitions storage and distribution, demil, and maintenance functions, and the Supply & Storage JCSG developed a recommendation to relocate the Defense Distribution Depot function. These three recommendations comprise the majority of the personnel and functions at Red River, and enabled the Army to develop an integrated recommendation for the closure of Red River Army Depot.

- The IJCSG determined infrastructure capacity using the larger of workload requirements or core requirements.
- The group considered the core requirement changes identified in the 2025 Force Structure Plan.
- The IJCSG analysis followed the guidance in DoD Handbook 4151.18H, which provides a standard methodology for measurement of depot maintenance, in the development of its recommendations. The IJCSG analysis includes adding 2.6 M DLH supplemental Combat Vehicle capacity at Anniston (2.2M DLHs) and Letterkenny (.4M DLHs) based on 1.0 shift. This additional capacity is sufficient to meet the needs of the peacetime Army in both short term and long term future
- The JCSG determined during a deliberative session to use a 1.5 shift in its modeling to account for surge. This planning approach preserves and retains sufficient capacity for future and unknown requirements and is consistent with the standard methodology of DoD Handbook 4151.18H.
- The closure of Red River Army Depot reinforces Anniston's and Letterkenny's roles as Centers of Industrial and Technical Excellence for Combat Vehicles (Anniston) and Missile Systems (Letterkenny).
- The receiving depots have greater maintenance capability, higher facility utilization, and greater opportunities for inter-service work-loading.
- This recommendation retains a sufficient industrial base performing depot maintenance for ground and missile systems to meet 2025 Force Structure requirements.

I am confident that the Department's recommendations will enhance transformation, combat effectiveness, and the efficient use of taxpayers' money. I hope this and the attached

information are useful to you. We stand ready to brief you if you so desire. POC is Dr. Craig College, 703-696-9534.

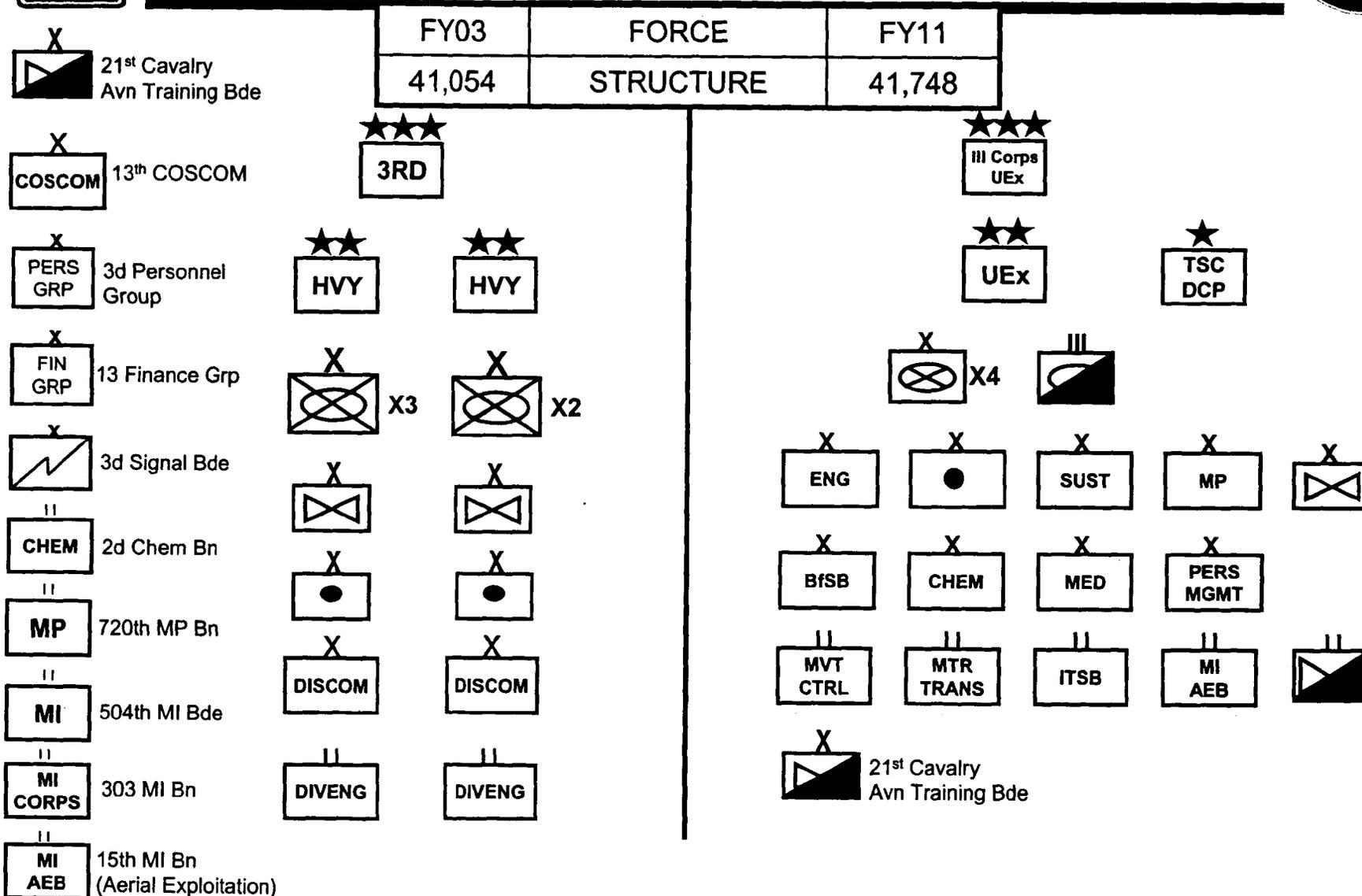
Sincerely,

A handwritten signature in black ink, appearing to read "Geoffrey G. Prosch". The signature is written in a cursive style with a large initial 'G'.

Geoffrey G. Prosch
Principal Deputy Assistant Secretary of the Army
Installations & Environment



FT HOOD FY2003 → 2011

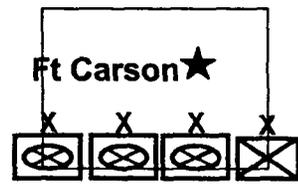




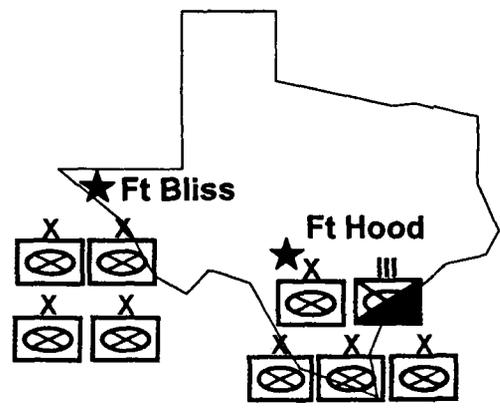
Brigade Combat Team Distribution Southwest US



UEX (2 Star)
4 BCT (3 Hvy/1 Inf)
Sust Bde
ITSB
GMD Bde (ARSPACE)



UEX (2 star)
4 Hvy BCT
Avn Bde
Fires Bde
Sust Bde
AAMDC
ADA Bde



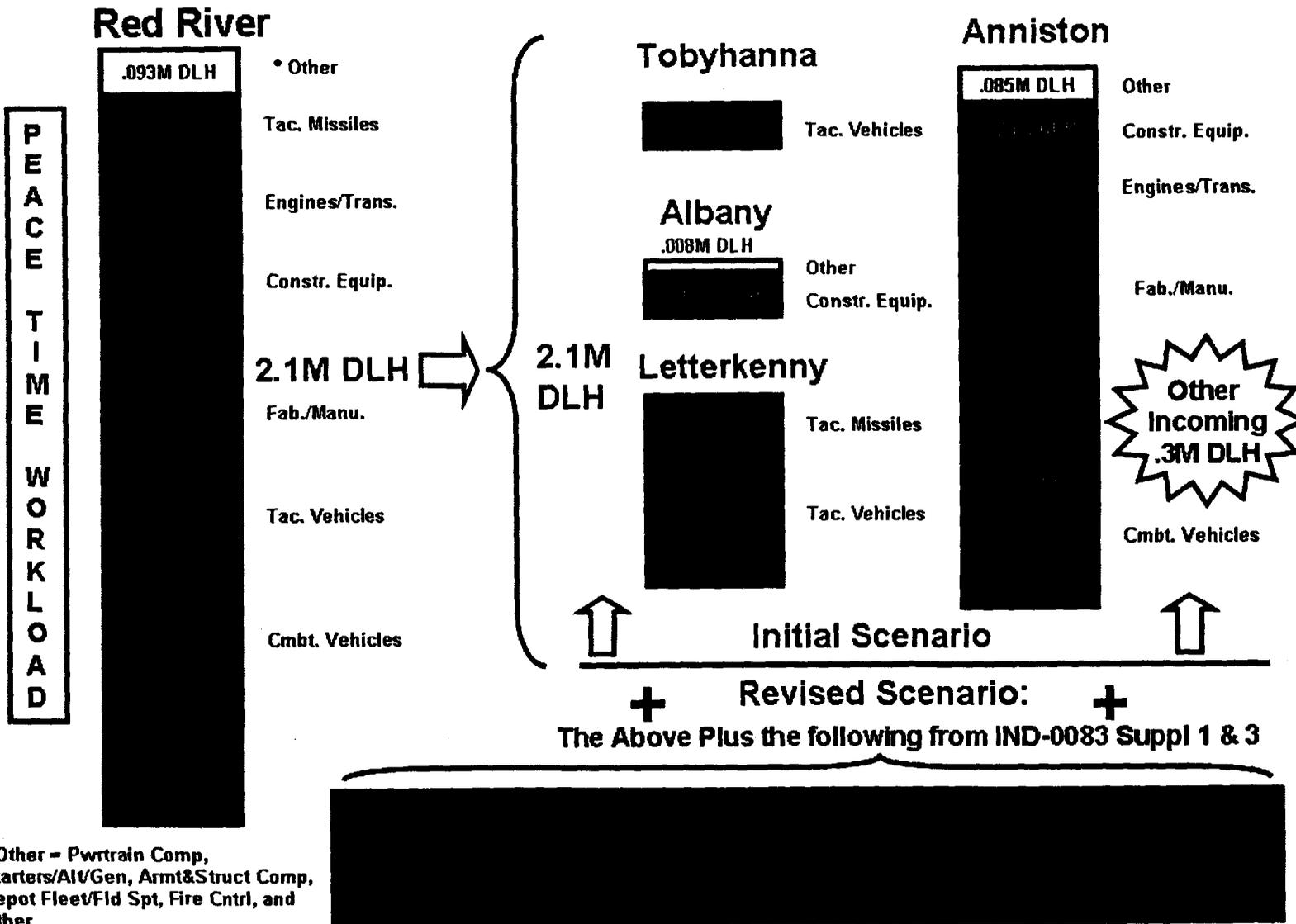
UEX (3 star) UEX (2 star)
5 Hvy BCT Fires Bde
Avn Bde Sust Bde
ITSB BfSB
Chem Bde MP Bde
Eng Bde TSC DCP

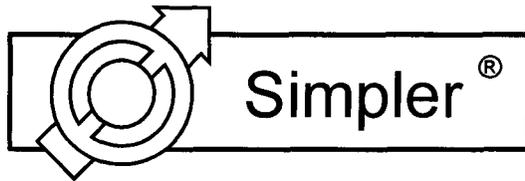
POST	MANEUVER ACREAGE	# OF BCT CURRENT/ PLANNED	CAPACITY # OF BCT HVY/LT	TRAINING STATUS	ACRES PER BCT (PLANNED)
HOOD	136,912	5 (5)	5/0	AMBER	27,400
BLISS	992,300	0 (4)	4/2	GREEN	248,000
CARSON	351,000	2 (4)	4/1	AMBER	87,800

- Brigade Combat Team (BCT) balanced in SW to optimize training and deployment capabilities
- Installations have sufficient capability to sustain Army Force Generation (ARFORGEN) requirements cycle
- Distribution ensures installations have capacity to support Reserve Component (RC) training cycle
- Reduces environmental impact from over utilization of training areas
- Force posture supports Army's conversion to modular force design
- FY03-11 Structure Authorizations:
 - Ft Hood 41,054 → 41,748 (+694)
 - Ft Bliss 9,953 → 28,214 (+18,261)
 - Ft Carson 13,790 → 21,638 (+7,848)



Red River Workload





June 20, 2005

To: BRAC Commissioners
Subject: RRAD Lean Transformation

It has been our great pleasure and honor to work with the fine people of Red River Army Depot for the past 3 years. Having worked with numerous different industries including healthcare, nuclear power generation, banking, and other DoD clients, Red River's progress has been second to none.

The magnitude of the changes over the last year, especially, have been amazing! To think that last summer, the HMMWV Re-Cap line was producing 2 to 3 vehicles per week... This week, the HMMWV team completed 20 trucks in just one day! 15 vehicles per day is an average day. Amazing. My background is in the automotive industry and I can tell you that I have NEVER witnessed such a rapid new product introduction. How was this accomplished? Lot's of very hard work and a truly dedicated workforce. During one rapid improvement event the lean team, along with the line mechanics, came in on a Friday and Saturday to rearrange the assembly line and ready it for production that following Monday morning. When the line started on Monday, it barely skipped a beat. This team is always up for a challenge.

The above examples are only a sampling of the type of dedication and devotion to one's Army and one's Country that you will find here in Bowie County, Texas at Red River Army Depot.

In our history of guiding clients through "Lean Transformations", it has been our experience that clients typically "hit their stride" and find sustainable momentum for change after year 2 or year 3. I would urge you to take RRAD's performance over the last year as evidence that they are truly running an efficient, flexible, and quality conscious organization. I would also urge you to reconsider your decision to close such a world class organization. To close a facility such as this would be a great loss to the U.S. Army, in my professional opinion.

Respectfully,

Kurt Knoth

Kurt Knoth
Manager of Consulting Services
Simpler Consulting
Cell: 336-491-2430

Enclosures: HEMMT One pager.ppt, HMMWV One pager.ppt, SEE One pager.ppt



Red River Army Depot

Red River Army Depot Case Study “HMMWV Recap”

Presenters: Marc Higgs & Ladell Hinton
Telephone (903) 334-3455
Marc.Higgs@redriver-ex.army.mil
Ladell.Hinton@us.army.mil

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Red River Army Depot



DCN: 12048

Agenda ~

About Red River Army Depot

Metrics

Why Lean

Red River's Continuous Improvement Tactics

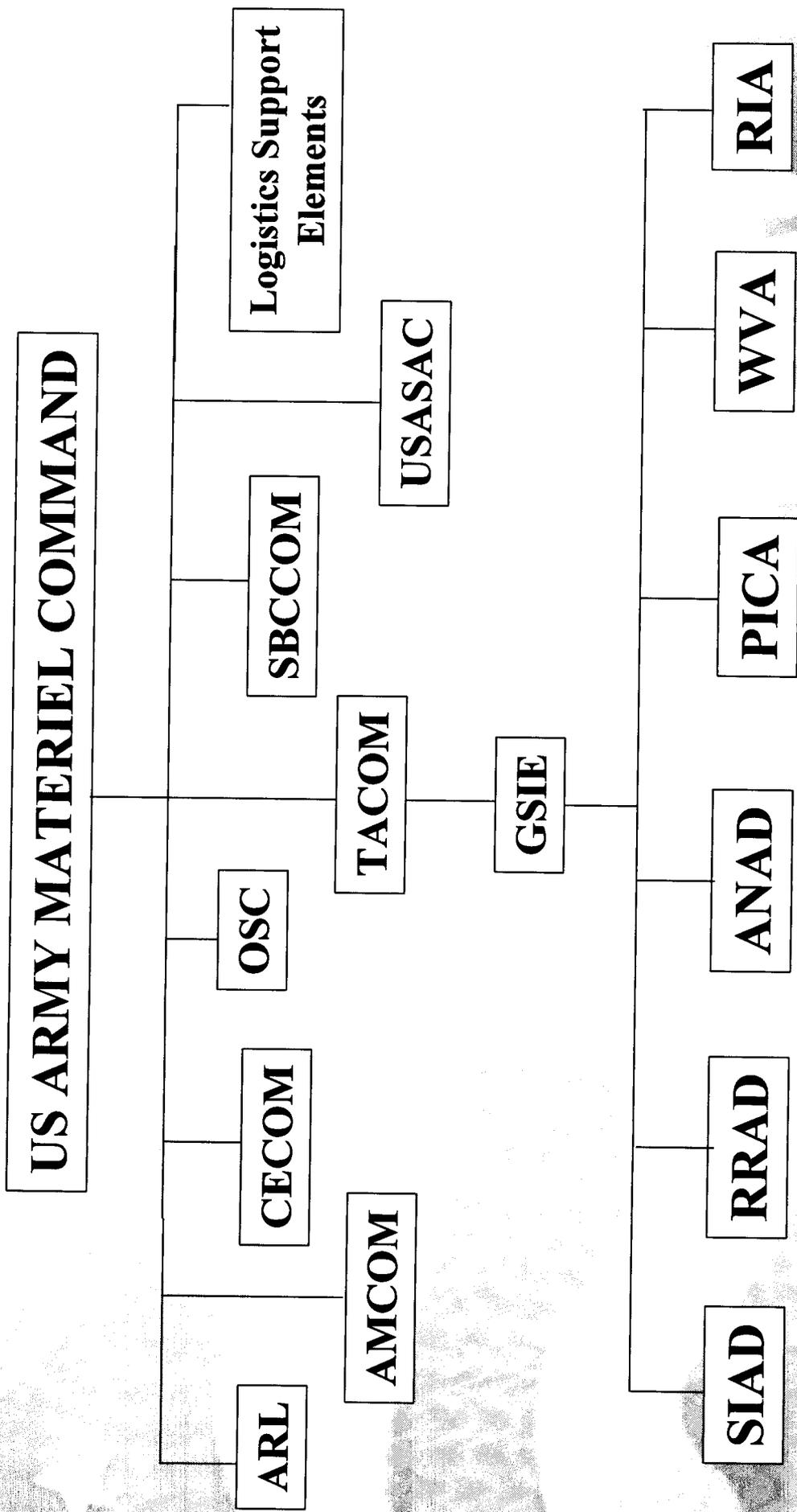
Review of HMMWV Recap Incremental Improvements

Feedback/Lessons Learned

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Red River Army Depot



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Red River Army Depot

Facility Overview ~

Location: North East Texas (Four States Area)

Size: 18,000 Acres

Industrial Space: 1396 Buildings, 7.85M Square Feet

Employees: 2500

FY05 Revenue Stream: \$600M

Over 300 Product Programs

Combat Platforms (Bradley Fighting Vehicle)

**Tactical Systems (Trucks, Materiel Handling
Equipment, Engineer Equipment)**

Air Defense Systems (Patriot & Hawk Missile Systems)

SENSEI: Simpler



Red River Army Depot



*Work in
Progress*

RRAD Mission Statement ~

- ★ **To Conduct (Light) Ground Combat, Air Defense, and Tactical Systems Maintenance, Certification, and Related Support Services Worldwide for the US Armed Forces and Allied/Friendly Nations**
- ★ **Provide Essential Base Support Services to Red River Industrial Complex Missions**
- ★ **To Be an Active and Viable Partner in Bowie County, Greater Texarkana Community, and The Four States Area at Large**



Red River Army Depot



DCN: 12048

Command Metrics ~

Penetration:

Nineteen Value Streams Engaged

Account for 25% of Red River Army Depot (RRAD) Population

Account for >50% of RRAD FY 05 Revenue

Change Pace:

3-5 Events Per Month

75 Teams Per Year Pace

Full-Time Core Team Members: 25

Developing Internal Experts:

30% (750) Have Participated on at Least One Team

5% (150) Have Participated On More Than Six Teams

1% (30) Have Participated On More Than Twelve Teams

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Red River Army Depot



DCN: 12048

Our Performance Metrics ~

Cost

Reduce Direct Labor Hour Charges 10% Each Year
Maintain Expenses 10% Below Fixed Price Quote

Quality

Reduce In Process Deficiencies & Shortcomings 50% each Year
Reduce Shipping Line Deficiencies & Shortcomings 75% each Year
Performance

Improve Productivity by 50% per Event
Reduce Lead Time by 50% per Event

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Red River Army Depot

DCN: 12048



Why Lean – Army Transformation ~

Support an Ever Changing Customer

Purpose Cannot Be Survival

Base Realignment & Closure

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Red River Army Depot



DCN: 12048

*Create a Continuous Process
Change Culture ~*

**Command Policy Deployment
Steer Energy & Resources in the Right Direction
“Sensei”**

**Hire a Consultant
Change Agent**

**Focus the Energy Day-by-Day
Full Time Lean Core Team**

**Develop, Manage, Maintain the Plan
Re-organize By Value Stream**

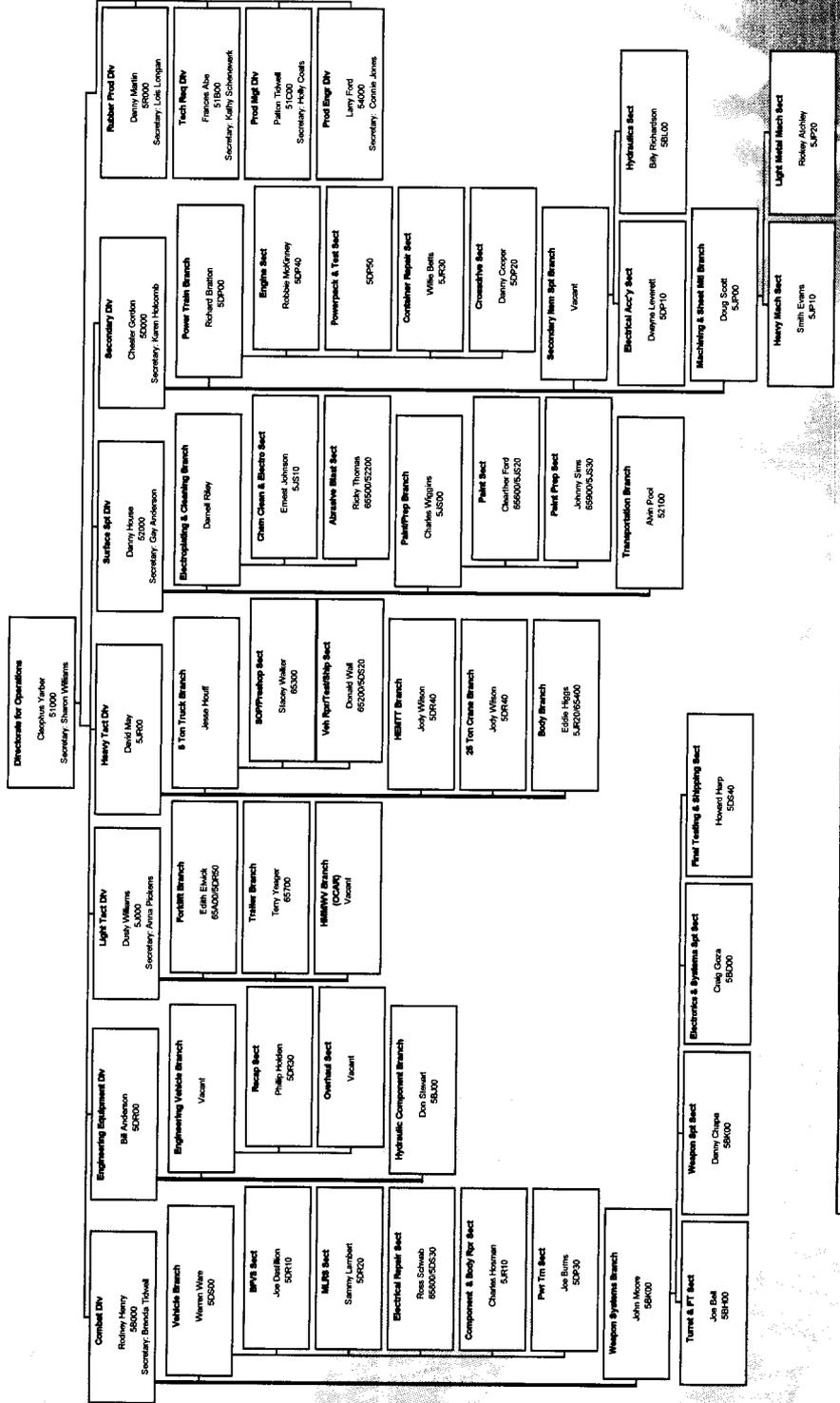
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Red River Army Depot

Improvement Plan (Value Stream Alignment) ~

Organize by Value Stream



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Red River Army Depot



DCN: 12048

Leadership
Teaming
Commitment

The Plan ~

Value Stream Analysis

Current – Identify waste/tie everything together

Ideal – How high is high?

Future – Target (6-12 months)

Rapid Improvement Plan

How to reach the future?

How to achieve continual improvement?

Schedule of events?

Who is responsible for implementation?

Most Important! Owned & Operated by the VS Mgr

Rapid Improvement Event (RIE)

Implement Improvements rapidly

Develop cells – Concentrate on Flow & Pull

Communication – Visual Management

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Red River Army Depot

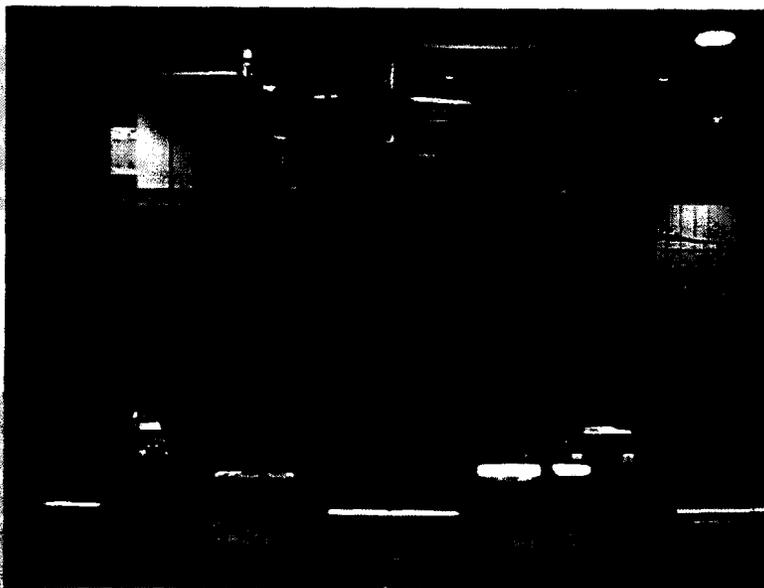
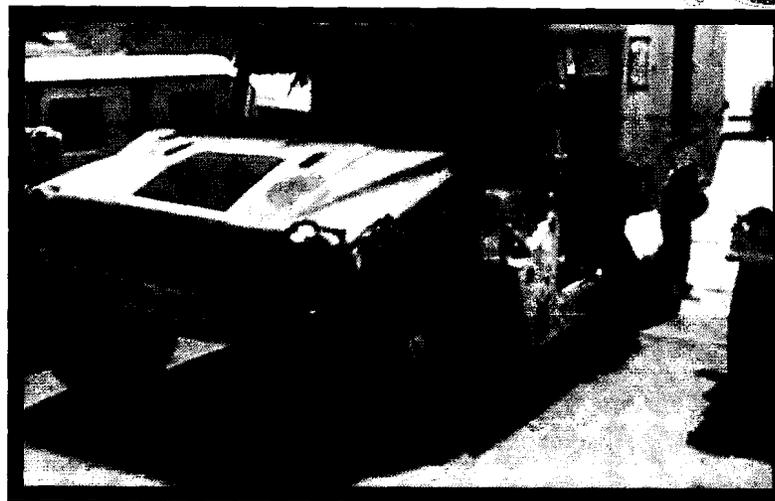


Why Lean the HMMWV Recap Process? ~

Program Growth

High Visibility

OIF



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Red River Army Depot



~ HMMWV Recap Launch at RRAD, July 04

- HMMWV Recap Line Launch begin in late 2002
- By July 2004, production rate was an average of 3 vehicles per month.
- Conducted VSA in July 2004 to develop roadmap to be at output goal of 200 vehicles per month by end of June, 2005.

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Red River Army Depot



~ HMMWV Recap Launch at RRAD, Aug 04

- Accelerated vehicle disassembly and assembly line output
- Removed one paint process cycle

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Red River Army Depot



~ HMMWV Recap Launch at RRAD, Sep 04

- Conducted events in commodity center (major assembly repair)
- Began looking at trigger points on the line pulling from parts suppliers
- Waterspider routes established
- Began posting standard work in cells as established

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Red River Army Depot



~ HMMWV Recap Launch at RRAD, Oct , Nov and Dec 04

- Established visual management for kitting operation
- Reduced quality issues on road test by 50%
- Trained (on first shift) new hires for second shift production
- Moved second shift trained mechanics to second shift
- Refined the parts kitting processes
- Conducted new VSA
 - Identified plan for 18 per day on one shift (to every ones amusement)



Red River Army Depot



~ HMMWV Recap Launch at RRAD, Jan 05

- Conducted training of Team leaders
 - On standard work sequence
 - Incorporated inspection into mechanic processes
 - Initiated use of Production Control Boards (PCB's)
 - Tracked materials shortages on separate PCB's
 - Converted Final assembly to flow process



Red River Army Depot



DCN: 12048

~HMMWV Launch at RRAD, Feb 05

- Executed plan to balance assembly line output to 30 minute T/T by station by each mechanic
- Executed installation of new layout on 21st
- Engine horseshoe station installed
- All stations feeding main assembly line and all sub assy stations revised to include necessary equipment to meet T/T
- Incorporated windshields; hoods; final test; armor station; power packs into new assembly line

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Red River Army Depot



~ HMMWV Launch at RRAD, Mar and Apr 05

- Eliminated second shift assembly operations
- Producing 12 veh per day in 10 hours
- Hit record 16/day mark, with average of 15/day for that particular week
- Team developed engine cell, fuel tank/radiator/air canister cell
- Exceeded vehicle production schedule (240) by producing 290

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Red River Army Depot



~ HMMWV Recap Launch at RRAD, May and June 05

- Produced 18 vehicles in a 10 hour day
- Monthly production rate was 310 vehicles
- During June 05, Conducted a third VSA to increase vehicle output to 32 vehicles per 10 hour day.

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Red River Army Depot HMMWV Recap Performance History

Month	# Vehicles/week	Manhours (% reduction)
July '04 Baseline	0.5	
Aug '04	2	5
Sep '04	7	10
Oct '04	10	18.5
Nov '04	18	20
Dec '04	31	25
Jan '05	38	30
Feb '05	40	44
Mar '05	50	55
Apr '05	70	60
May '05	73	70
Jun '05	84	74

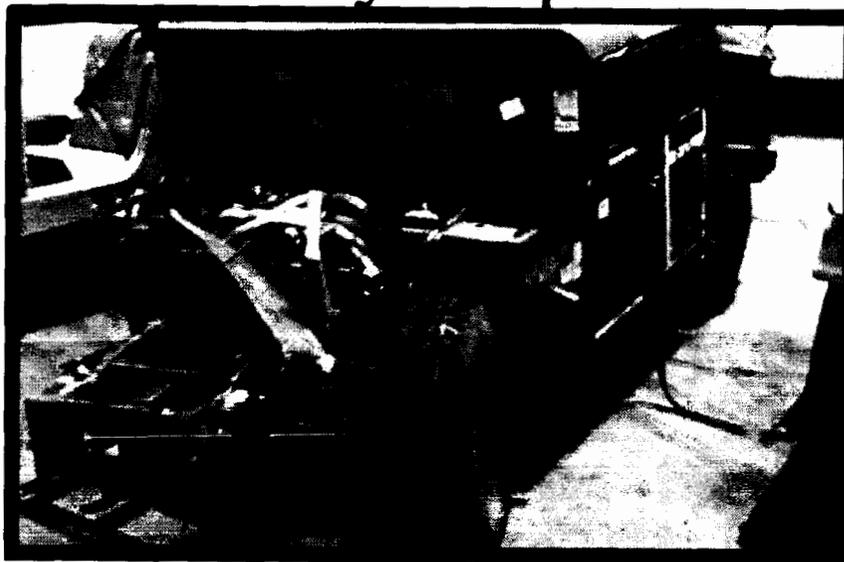
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Red River Army Depot



*HMMWV Recap Success
Numbers tracking ~*



Productivity : 74%
Output: 400%
Lead Time: 67%



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Red River Army Depot



Feedback/lessons Learned ~

Pockets of Improvement Are NOT Good Enough.

Must Have Policy Deployment

Supervisor Must Establish and Sustain a Continuous Improvement Culture.

Supervisor Must Lead by Example.

Supervisor Must Sustain Value Stream Change.

Shop Floor Buy-in Is Key to Success.

Management by Assessments

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Red River Army Depot

Questions?

Committed to Excellence



Red River Army Depot

BRAC 05 recommendations close Red River Army Depot, eliminating excess capacity, reducing redundancy, and consolidating/relocating functions to other DoD Centers of Technical Excellence supporting combat readiness for all services. The recommendations take into consideration the existing synergy of Red River, the Munitions Center, and the DLA Distribution Center, and it relocates each into installations where the synergy is compatible with the gaining installation. The closure establishes better utilization of DoD maintenance capacity for combat and tactical vehicles in a peace time environment while maintaining the capability to surge using government and commercial (partnering) capacity.

Incoming Activities

What: Re-locate units into a new Armed Forces Reserve Center, from the Watts-Guillot United States Army Reserve Center, Texarkana, Texas to the New Boston Army National Guard property, adjacent to Red River Army Depot.

Why: Transform Reserve Component facilities in the State of Texas into multi-functional installations that will enhance unit readiness, increase training opportunities, and generate operational efficiencies.

Departing Activities

What: Storage and demilitarization functions of the Munitions Center to McAlester Army Ammunition Plant, OK.

Why: Removes redundancy and supports the development of multi-functional fully work-loaded Munitions Centers of Excellence that support readiness for all the Services.

What: Munitions maintenance functions of the Munitions Center to McAlester Army Ammunition Plant, OK, and Blue Grass Army Depot, KY.

Why: Removes redundancy and supports the development of multi-functional fully work-loaded Munitions Centers of Excellence that support readiness for all the Services.

What: Depot maintenance of Armament and Structural Components, Combat Vehicles, Depot Fleet/Field Support, Engines and Transmissions, Fabrication and Manufacturing, Fire Control Systems and Components, and Other Equipment to Anniston Army Depot, AL.

Why: Removes redundancy and relocates functions to other DoD Centers of Industrial and Technical Excellence that support readiness for all the Services.

What: Depot maintenance of specified Powertrain Components (other than engines and transmissions), and Starters/Generators to Marine Corps Logistics Base Albany, GA.

Why: Removes redundancy and relocates functions to other DoD Centers of Industrial and Technical Excellence that support readiness for all the Services.

What: Depot maintenance of Construction Equipment to Anniston Army Depot, AL, and Marine Corps Logistics Base Albany, GA.

Why: Removes redundancy and relocates functions to other DoD Centers of Industrial and Technical Excellence that support readiness for all the Services.

What: Depot maintenance of Tactical Vehicles to Tobyhanna Army Depot, PA and Letterkenny Depot, PA.

Why: Removes redundancy and relocates functions to other DoD Centers of Industrial and Technical Excellence that support readiness for all the Services.

What: Depot maintenance of Tactical Missiles to Letterkenny Army Depot, PA.

Why: Removes redundancy and relocates functions to other DoD Centers of Industrial and Technical Excellence that support readiness for all the Services.

What: Disestablish the supply, storage, and distribution functions for tires, packaged Petroleum, Oil, and Lubricants, and compressed gases.

Why: Achieves economies and efficiencies that enhance the effectiveness of logistics support to forces as they transition to more joint and expeditionary operations.

What: Storage and distribution functions and associated inventories of the Defense Distribution Depot to the Defense Distribution Depot, Oklahoma City, OK.

Why: Achieves economies and efficiencies that enhance the effectiveness of logistics support to forces as they transition to more joint and expeditionary operations.

Quantitative Results

Net Personnel Impacts ¹			MILCON Cost Estimate
Military	Civilian	Student	
-9	-2,491	0	0

Implementation Timeline:

According to BRAC law, these actions must be initiated within two years and completed within six years from the date the President transmits the report to Congress.

Internal Communications: (Red River Army Depot Work Force)

¹ Based on FY03 ASIP data. Does not reflect any personnel changes resulting from standard programming and Command Plan actions since FY03.

- Red River Army Depot has a long and storied history, and has made significant contributions to supporting the Army's missions; however the Army must now look to future requirements and develop an installation portfolio that can support and sustain its new force structure, and missions as the Army transforms to an expeditionary force.
- Each unit and activity transferred from Red River Army Depot has been placed to enhance its operational or support capability through consolidations or co-locations.
- The result of these hard decisions is a basing configuration that better supports our transforming Army and saves money.

External Communications: (Civilian community)

- Red River Army Depot has a long and storied history, and has made significant contributions to supporting the Army's missions; however the Army must now look to future requirements and develop an installation portfolio that can support and sustain its new force structure, and missions as the Army transforms to an expeditionary force.
- The indirect economic impact of this closure is estimated at a maximum potential reduction of 6.15 percent of the economic area employment.
- The Army is committed to working with local communities as Red River Army Depot closes to smooth the transition process.
- Red River Army Depot has played a long and storied role in the history of the US Army and it was a difficult decision to close it.
- The transformation objectives of the US Army seek to retain installations that are capable of accepting multiple missions.

Approving BRAC Recommendations - Statutory Steps:

- 16 May 05 SECDEF forwards Recommendations to BRAC Commission
- 08 Sept 05 BRAC Commission recommendations due to President
- 23 Sept 05 President approves/disapproves Commission recommendations
- 20 Oct 05 Commission resubmits recommendations (if initially rejected by President)
- 07 Nov 05 President submits final recommendations to Congress. Once submitted, the plan becomes final within 45 legislative days, unless Congress passes a joint resolution to block the entire package.

BRAC Recommendations impacting Red River Army Depot

- Close Red River Army Depot
- 4 Regional Strategic Distribution Platforms
- Transform Reserve Components in Texas

RED RIVER SOUND BITES

Capacity Utilization:

Capacity is calculated utilizing workload in Direct Labor Hours, 40 hrs per week, 5 - 8 hr days, and number of workstations as outlined in DoD Handbook 4151-15H.

YEAR	Utilized Capacity	Reserved Capacity	Excess Capacity	Total Capacity	Funded Workload	Utilization
1999	1.506	.082	0	1.588	1.506	94.84%
2000	1.387	.138	0	1.588	1.387	87.35%
2001	1.501	.106	0	1.588	1.501	94.52%
2002	1.765	.372	0	1.849	1.765	95.47%
2003	2.065	0	0	1.849	2.065	111.7%
2004	2.752	0	0	2.660	2.752	103.44%

Data for FY 99 is estimated.

We have reconfigured our processes, taken facilities out of mothball, and acquired additional facilities to support our requirements over time. The baseline for capacity changed over time and will continue to change through continued process improvements and recapture of available floor space resident on the depot that is currently not utilized for production purposes or is underutilized. Zero reserve capacity is a by product of the methodology used to determine capacity but is not an absolute or accurate picture of the remaining ability of Red River to increase its throughput or to accept additional workload. Capacity and Capability are not synonymous.

Maintenance Productive Floor Space:

Red River has 1.2 M Square Feet of productive floor space and it is all currently under use. We are working multiple shifts and operating in some areas 6 and 7 days a week to accommodate the production rates.

Workload Growth: (Hours, Manpower & Dollars)

Direct Labor Hours

Production FY01: 1.5 M DLH
 Production FY02: 1.8 M DLH
 Production FY03: 2.1 M DLH
 Production FY04: 2.8 M DLH
 Production FY05: 4.0 M DLH

Red River is capable of surging to meet the requirements for 4.0M in this FY. This equates to all manhours required to accomplish over 5600 vehicles identified for RECAP, RESET, and Modularity. These include 781 five ton trucks, 4000 HMMWVs (RECAP and RESET), 270 HEMTTs, 253 SEEs, 111 forklifts, 201 Bradleys, 99 Patriot PREP Missiles, 200 Patriot Modernization thru spares, 510 Patriot Reset Inspections, 218 Patriot Reset Missile Repair and numerous major secondary items. The combination of organic personnel, contractors, and a realistic overtime rate of 25% are all factors for success. We have worked to

improve choke point processes by working with our industry partners to acquire needed services, particularly blasting, cleaning, and painting.

<u>End Strength:</u>	FY01	FY02	FY03	FY04	FY05
Organic	1462	1609	1666	2082	2637
Contractor	<u>252</u>	<u>304</u>	<u>579</u>	<u>385</u>	<u>411</u>
Total	1714	1913	2245	2467	3048
 <u>Growth in Dollars</u> (New Orders)	\$245.8	\$220.5	\$356.5	\$407.8	\$680.6*

*PRESBUD Targets

Lean Initiatives:

Engaged 23 value streams since Apr 02 which include:

Bradley vehicle and secondary programs, MLRS vehicle and secondary programs, HEMTT vehicle and secondary programs, HMMWV, SEE, & 900 series trucks

Success stories include:

HEMTT Cargo Recap Cycle Time reduction went from 120 days in FY02 to the current average of 30 days. The baseline in FY02 was 2003 hrs/vehicle and is currently an average of 1303 hrs/vehicle.

HMMWV Recap Assembly Line output from the Apr 04 low rate initial production of 1 vehicle per week (4/month) to the current average of 10 vehicles/day (200/month). This is the maximum rate that the wholesale supply system can support at the current time.

Bradley Engine productivity improvement went from 196 hrs/engine in FY02 to current average of 140 hrs/engine.

HMPT Transmission productivity improvement went from 92 hrs/transmission in FY02 to a current average of 79 hrs/transmission.

HEMTT Engine productivity improvement went from 168 hrs/engine in FY02 to the current average of 110 hrs/engine.

SEE Vehicle Productivity improvement from 1032 hrs/vehicle in Oct 03 to the current average of 850 hrs/vehicle.

Kingpin fabrication productivity improvement from average of 15.5 hrs/kingpin in 2003 to the current average of 11 hrs/kingpin.

orgcode	orgName	rownum	Occupational Series (4-digit numeric) Number	FY03 (. of persons) Number of personnel	FY04 (. of persons) Number of personnel	Source (Text)	changedate	Answersource
01035	ANNISTON ARMY DEPOT	1	3414	9.08	9.08	FY03: End of Year PSR Data Dated 30 Sep 2003 and FY04: PSR Data for Budget Revision dated Jan 2004. □	8/12/2004	
01035	ANNISTON ARMY DEPOT	2	3416	1.96	1.78	FY03: End of Year PSR Data Dated 30 Sep 2003 and FY04: PSR Data for Budget Revision dated Jan 2004. □	8/12/2004	
01035	ANNISTON ARMY DEPOT	3	3501	0.53	0.36	FY03: End of Year PSR Data Dated 30 Sep 2003 and FY04: PSR Data for Budget Revision dated Jan 2004. □	8/12/2004	
01035	ANNISTON ARMY DEPOT	4	3502	0.18	0.18	FY03: End of Year PSR Data Dated 30 Sep 2003 and FY04: PSR Data for Budget Revision dated Jan 2004. □	8/12/2004	
01035	ANNISTON ARMY DEPOT	5	5704	0.18	0.18	FY03: End of Year PSR Data Dated 30 Sep 2003 and FY04: PSR Data for Budget Revision dated Jan 2004. □	8/12/2004	
01035	ANNISTON ARMY DEPOT	6	4737	0	0.89	FY03: End of Year PSR Data Dated 30 Sep 2003 and FY04: PSR Data for Budget Revision dated Jan 2004. □	8/12/2004	
42461	LETTERKENNY ARMY DEPOT	1	1152	0.84	1.18	AWPS and Personnel records	8/11/2004	
42461	LETTERKENNY ARMY DEPOT	2	2001	0.5	0.55	AWPS and Personnel records	8/11/2004	
42461	LETTERKENNY ARMY DEPOT	3	2602	1.52	1.37	AWPS and Personnel records	8/11/2004	
42461	LETTERKENNY ARMY DEPOT	4	2604	21.76	24.48	AWPS and Personnel records	8/11/2004	
42461	LETTERKENNY ARMY DEPOT	5	2606	0.76	0.82	AWPS and Personnel records	8/11/2004	
42461	LETTERKENNY ARMY DEPOT	6	2610	2.77	3	AWPS and Personnel records	8/11/2004	
42461	LETTERKENNY ARMY DEPOT	7	2854	4.2	4.64	AWPS and Personnel records	8/11/2004	
42461	LETTERKENNY ARMY DEPOT	8	3105	0.17	0.18	AWPS and Personnel records	8/11/2004	
42461	LETTERKENNY ARMY DEPOT	9	3414	1.34	1.27	AWPS and Personnel records	8/11/2004	
42461	LETTERKENNY ARMY DEPOT	10	3416	0.08	0.18	AWPS and Personnel records	8/11/2004	
42461	LETTERKENNY ARMY DEPOT	11	3703	1.09	1.1	AWPS and Personnel records	8/11/2004	
42461	LETTERKENNY ARMY DEPOT	12	3711	1	1.27	AWPS and Personnel records	8/11/2004	
42461	LETTERKENNY ARMY DEPOT	13	3806	1	1.1	AWPS and Personnel records	8/11/2004	
42461	LETTERKENNY ARMY DEPOT	14	3809	0.76	0.82	AWPS and Personnel records	8/11/2004	
42461	LETTERKENNY ARMY DEPOT	15	4102	2.02	2.5	AWPS and Personnel records	8/11/2004	
42461	LETTERKENNY ARMY DEPOT	16	4419	0.17	0.18	AWPS and Personnel records	8/11/2004	
42461	LETTERKENNY ARMY DEPOT	17	4816	0.08	0.18	AWPS and Personnel records	8/11/2004	
42461	LETTERKENNY ARMY DEPOT	18	5306	0.76	0.64	AWPS and Personnel records	8/11/2004	
42461	LETTERKENNY ARMY DEPOT	19	5350	0.34	0.64	AWPS and Personnel records	8/11/2004	
42461	LETTERKENNY ARMY DEPOT	20	5352	0.25	0.27	AWPS and Personnel records	8/11/2004	
42461	LETTERKENNY ARMY DEPOT	21	5378	0.41	0.82	AWPS and Personnel records	8/11/2004	
42461	LETTERKENNY ARMY DEPOT	22	5423	0.59	0.72	AWPS and Personnel records	8/11/2004	
42461	LETTERKENNY ARMY DEPOT	23	5703	0.59	0.45	AWPS and Personnel records	8/11/2004	
42461	LETTERKENNY ARMY DEPOT	24	5803	1.76	2.46	AWPS and Personnel records	8/11/2004	
42461	LETTERKENNY ARMY DEPOT	25	6641	3.95	2.5	AWPS and Personnel records	8/11/2004	
42461	LETTERKENNY ARMY DEPOT	26	6904	0.34	0.45	AWPS and Personnel records	8/11/2004	
42461	LETTERKENNY ARMY DEPOT	27	6910	1.68	1.91	AWPS and Personnel records	8/11/2004	

Capitol - only for use in the Political Vehicle

42461	LETTERKENNY ARMY DEPOT	28	7001	1.43	1.82	AWPS and Personnel records	8/11/2004
42461	LETTERKENNY ARMY DEPOT	29	7009	0.34	0.27	AWPS and Personnel records	8/11/2004
42461	LETTERKENNY ARMY DEPOT	30	0	0	0	NA	8/11/2004
48733	RED RIVER ARMY DEPOT	1	2601	0.38	5.98	Position Control and Contractor Support Reports.	8/12/2004
48733	RED RIVER ARMY DEPOT	2	2604	0	0.18	Position Control and Contractor Support Reports.	8/12/2004
48733	RED RIVER ARMY DEPOT	3	2610	1.75	2.57	Position Control and Contractor Support Reports.	8/12/2004
48733	RED RIVER ARMY DEPOT	4	3106	0.01	0.05	Position Control and Contractor Support Reports.	8/12/2004
48733	RED RIVER ARMY DEPOT	5	3401	1.53	1.83	Position Control and Contractor Support Reports.	8/12/2004
48733	RED RIVER ARMY DEPOT	6	3414	0.84	2.79	Position Control and Contractor Support Reports.	8/12/2004
48733	RED RIVER ARMY DEPOT	7	3416	0.75	1.03	Position Control and Contractor Support Reports.	8/12/2004
48733	RED RIVER ARMY DEPOT	8	3703	1.06	1.83	Position Control and Contractor Support Reports.	8/12/2004
48733	RED RIVER ARMY DEPOT	9	3711	0.95	2.86	Position Control and Contractor Support Reports.	8/12/2004
48733	RED RIVER ARMY DEPOT	10	3801	23.47	30.81	Position Control and Contractor Support Reports.	8/12/2004
48733	RED RIVER ARMY DEPOT	11	3806	0.18	0.02	Position Control and Contractor Support Reports.	8/12/2004
48733	RED RIVER ARMY DEPOT	12	3809	0.09	0.24	Position Control and Contractor Support Reports.	8/12/2004
48733	RED RIVER ARMY DEPOT	13	3858	1.22	0.43	Position Control and Contractor Support Reports.	8/12/2004
48733	RED RIVER ARMY DEPOT	14	4101	1.07	0.64	Position Control and Contractor Support Reports.	8/12/2004
48733	RED RIVER ARMY DEPOT	15	4102	22.73	17.04	Position Control and Contractor Support Reports.	8/12/2004
48733	RED RIVER ARMY DEPOT	16	4301	7.91	6.28	Position Control and Contractor Support Reports.	8/12/2004
48733	RED RIVER ARMY DEPOT	17	5401	2.72	1.07	Position Control and Contractor Support Reports.	8/12/2004
48733	RED RIVER ARMY DEPOT	18	5423	13.39	7.68	Position Control and Contractor Support Reports.	8/12/2004
48733	RED RIVER ARMY DEPOT	19	5803	123.73	193.54	Position Control and Contractor Support Reports.	8/12/2004
48733	RED RIVER ARMY DEPOT	20	6641	0	0.68	Position Control and Contractor Support Reports.	8/12/2004
48733	RED RIVER ARMY DEPOT	21	6901	0.45	0.26	Position Control and Contractor Support Reports.	8/12/2004
48733	RED RIVER ARMY DEPOT	22	8255	0.3	6.84	Position Control and Contractor Support Reports.	8/12/2004
48733	RED RIVER ARMY DEPOT	23	3105	0.01	0	Position Control and Contractor Support Reports.	8/12/2004
48733	RED RIVER ARMY DEPOT	24	5801	0.15	0	Position Control and Contractor Support Reports.	8/12/2004
42877	TOBYHANNA ARMY DEPOT	1	4102	28	40	TYAD Manning Document WORK03 and WORK04, Civilian Personnel Status Report (Defense Civilian Personnel Data System (DCPDS) and TYAD Contractor Activity Report.	8/12/2004
42877	TOBYHANNA ARMY DEPOT	2	5423	6	8	TYAD Manning Document WORK03 and WORK04, Civilian Personnel Status Report (Defense Civilian Personnel Data System (DCPDS) and TYAD Contractor Activity Report.	8/12/2004
42877	TOBYHANNA ARMY DEPOT	3	7009	20	31	TYAD Manning Document WORK03 and WORK04, Civilian Personnel Status Report (Defense Civilian Personnel Data System (DCPDS) and TYAD Contractor Activity Report.	8/12/2004
42877	TOBYHANNA ARMY DEPOT	4	4607	0	1	TYAD Manning Document WORK03 and WORK04, Civilian Personnel Status Report (Defense Civilian Personnel Data System (DCPDS) and TYAD Contractor Activity Report.	8/12/2004

orgcode	orgName	rownum	Bldg Description (Text)	CCN (alpha-numeric)	FAC (numeric) Code	FY04 C1 (in KSF) Thousands of Square Feet	FY04 C2 (in KSF) Thousands of Square Feet
01035	ANNISTON ARMY DEPOT	1	Major End Item Rebuild Shop, Building 145	21435	2142	3.36	0
42461	LETTERKENNY ARMY DEPOT	1	Bldg 350 Depot Maintenance Rebuild Shop	F21440	2142	132.8	0
42461	LETTERKENNY ARMY DEPOT	2	Bldg 12 GM Maint Shop	F21210	2121	3	0
42461	LETTERKENNY ARMY DEPOT	3	Bldg 102 GM Maint Shop	F89115	8910	1	0
42461	LETTERKENNY ARMY DEPOT	4	Bldg 320 Ship/Rec	F14133	1410	21.1	0
42461	LETTERKENNY ARMY DEPOT	5	Bldg 351 Steam Clean Bldg	F21458	2142	5.2	0
42461	LETTERKENNY ARMY DEPOT	6	Bldg 378 Haz Mat Storage	F44135	4413	3	0
42461	LETTERKENNY ARMY DEPOT	7	Bldg S342 Storage GP Depot	F44110	4411	6.4	0
42461	LETTERKENNY ARMY DEPOT	8	Bldg S343 Storage GP Depot	F44110	4411	6.4	0
42461	LETTERKENNY ARMY DEPOT	9	Bldg S354 Storage GP Depot	F44110	4411	6.4	0
42461	LETTERKENNY ARMY DEPOT	10	Bldg S355 Major End Item	F21435	2142	1	0
42461	LETTERKENNY ARMY DEPOT	11	Bldg S366 Storage GP	F44220	4422	1.2	0
48733	RED RIVER ARMY DEPOT	1	Bldg 311. Concrete Masonary Unit & Steel construction. Current use as X-Ray facility. Total sq ft 1,878.	21440	2142	0.2	0
48733	RED RIVER ARMY DEPOT	2	Bldg 315. Concrete Masonary Unit construction. Current use is Heavy Machine Shop. Total sq ft is 34,563.	21440	2142	4.6	0
48733	RED RIVER ARMY DEPOT	3	Bldg 319. Concrete Masonary Unit construction. Current use is Component Cleaning Facility. Total sq ft is 10,800.	21408	2141	1.9	0
48733	RED RIVER ARMY DEPOT	4	Bldg 321. Concrete Masonary Unit construction. Current use is Kitting Facility. Total sq ft is 93,445.	21435	2142	23.6	0
48733	RED RIVER ARMY DEPOT	5	Bldg 323. Concrete Mansorary Unit and Steel construction. Current use is Paint & Paint Prep. Total sq ft is 58,616.	21417	2141	11.9	0
48733	RED RIVER ARMY DEPOT	6	Bldg 328. Concrete Mansorary Unit and Steel construction. Current use is Metal Treatment. Total sq ft is 4,600.	22416	2141	0.6	0
48733	RED RIVER ARMY DEPOT	7	Bldg 337. Steel construction. Current usage is Production Space. Total sq ft is 2,960.	14179	1499	2	0
48733	RED RIVER ARMY DEPOT	8	Bldg 345. Concrete Masonary Unit. Current use is Various. Total sq ft is 262,831.	21435	2142	86.5	0
48733	RED RIVER ARMY DEPOT	9	Bldg M358. Listed as Equipment building. Steel construction. Current uae is Cleaning. Total sq ft is 2,892.	Equip Bldg	0	0.6	0
48733	RED RIVER ARMY DEPOT	10	Bldg M359. Listed as Equipment building. Steel construction. Current uae is Cleaning. Total sq ft is 2,958	Equip Bldg	0	0.8	0
48733	RED RIVER ARMY DEPOT	11	bldg M360. Listed as Equipment building. Steel construction. Current use is Painting. Total sq ft is 13,276.	Equip Bldg	0	3.2	0
48733	RED RIVER ARMY DEPOT	12	Bldg 362. Steel construction. Current use is Cleaning. Total sq ft is 6,891	14163	1444	1.5	0

Facility Size / Type / Condition for Sq Ft - Actual Values

48733	RED RIVER ARMY DEPOT	Bldg 364, Steel construction. Current use is Cleaning. Total sq ft is 4,547.	21440	242	1	0
48733	RED RIVER ARMY DEPOT	Bldg 366, Steel construction. Current use is Paint Prep. Total sq ft is 1,860.	21440	2142	1.1	0
48733	RED RIVER ARMY DEPOT	Bldg 373, Concrete Masonary Unit construction. Current use is Dyno. Total sq ft is 25,189.	21872	2182	4.2	0
48733	RED RIVER ARMY DEPOT	Bldg M376. Listed as Equipment building. Steel construction. Current use is Dyno. Total sq ft is 4,803.	Equip Bldg	0	0.7	0
48733	RED RIVER ARMY DEPOT	Bldg 388, Concrete Masonary Unit construction. Current use is Production Space. Total sq ft is 4,640.	21435	2142	0.1	0
48733	RED RIVER ARMY DEPOT	Bldg 401, Steel construction. Current use is Production Space. Total sq ft is 17,669.	21440	2142	17	0
48733	RED RIVER ARMY DEPOT	Bldg 406, Steel construction. Current use is Production Space. Total sq ft is 18,000.	21710	2172	0.1	0
48733	RED RIVER ARMY DEPOT	Bldg 407, Steel construction. Current use is Production Space. Total sq ft is 24,577.	21440	2142	0.9	0
48733	RED RIVER ARMY DEPOT	Bldg 421, Concrete Masonary Unit and Steel construction. Current use is Production Space. Total sq ft is 30,951.	21710	2172	2.6	0
48733	RED RIVER ARMY DEPOT	Bldg 493, Concrete Masonary Unit construction. Current use is Rubber Products Div. Total sq ft is 106,293.	21440	2142	3	0
48733	RED RIVER ARMY DEPOT	Bldg 592, Concrete Masonary construction. Current use is Production Space. Total sq ft is 88,221.	21440	2142	88.2	0
42877	TOBYHANNA ARMY DEPOT	Bldg 9 Paint Shop	21879	2182	38.6	0
42877	TOBYHANNA ARMY DEPOT	Bldg 1C-4g	21710	2172	19.08	0
42877	TOBYHANNA ARMY DEPOT	Bldg 23	21710	2172	0	5.5
42877	TOBYHANNA ARMY DEPOT	Depot Com Elect Shop	21710	2172	0	5.5
42877	TOBYHANNA ARMY DEPOT	Bldg 1E IOF	21710	2172	48.232	0
42877	TOBYHANNA ARMY DEPOT	Depot Com Elect Shop	21710	2172	48.232	0

0	0 IFS, ISR reports and CURS Data	8/12/2004		
0	0 IFS, ISR reports and CURS Data	8/12/2004		
0	0 IFS, ISR reports and CURS Data	8/12/2004		
0	0 IFS, ISR reports and CURS Data	8/12/2004		
0	0 IFS, ISR reports and CURS Data	8/12/2004		
0	0 IFS, ISR reports and CURS Data	8/12/2004		
0	0 IFS, ISR reports and CURS Data	8/12/2004		
0	0 IFS, ISR reports and CURS Data	8/12/2004		
0	0 IFS, ISR reports and CURS Data	8/12/2004		
0	0 IFS, ISR reports and CURS Data	8/12/2004		
0	0 IFS, ISR reports and CURS Data	8/12/2004		
0	0 IFS, ISR reports and CURS Data	8/12/2004		
0	0 RPLANS, ISR, IMD Database	8/12/2004		
0	0 RPLANS, ISR, IMD Database	8/12/2004		
0	0 RPLANS, ISR, IMD Database	8/12/2004		
0	0 RPLANS, ISR, IMD Database	8/12/2004		

RRAD 20 Jun 05

Hawk 2 Patriot
Hawk in FMS

Wheeled vehicles

CITE

BMWV Recop

- will be at 30/day

- armor ready, not armored - can armor if need be

Patriot

- other FMS training mission

- only certified round in the Army inventory

- exacting process that guarantees mission availability for a guaranteed launch / engage / kill

- over 1300 hours of classroom training

- a number of tasks that are not visible to the eye as having been accomplished

- missiles stored at RRAD munitions center

Rubber Products

- only DoD capability

- M1 road wheels

- about 100 people in the facility

- supports all tracked systems

- M1 track is not currently a repairable item as this is not worked at RRAD for the Army

- formula was developed in house for the rubber

- future M1 track will be a repairable item for the Army

Brady Commission

- US commercial source is currently shut down from another recent catastrophic failure

- other commercial source is offshore

- DORT has already picked up the RRAD installation stocks / accounts for retail support
 - implemented in Aug / Sep 2004
 - provides the ability to issue straight from receiving right to the shop floor
 - RRAD still operates the ASRS
 - once in ASRS, a "part" is expensed to the repair program

- 4M covered / 4M improved ft² of storage
- about 6 hours away from the Port of Beaumont
- most items are "heavy" assets => big, bulky items
- workload is receipts & issues
- RRAD DORT picked up
- 80% of Aug / MC ties located here
- 70% of Air Force ties located here

→ what is the real intent of privatizing ties input?

What about
DORT kit / assembly
of boxes?

- is this the rubber?
- assembly?
- accommodation does establish the supply, storage, and distribution for ties
- normally receive about 1000 trucks / month but with OIF / OEA have gone to loading / unloading about 4000 trucks / month
- one of 2 Aug locations (other is DLA Fuzgehama) that does Total Package Fielding
- have the sewer / water here for 19 DLA Huber
 - this was not addressed in any of the accommodations, so what would happen to this?
 - DLA discretionary move?

- RRAD has been able to get road test miles down from 50 to 35 and hope to go to 25 based on quality seen after production
 - all approved & checked w/ the PM
- all HMMWV Recop is canvas and not hard top
 - if unit is displaying, armor will be applied at home station

Rubber Products

- completely automated except for the baskets
- vulcanization is the process that makes the rubber adhere
- there is no American source that can do this, only one company in Belgium
 - commercial industry does not have the capability to strip the rubber off
- in house rubber lab that certifies the rubber before any rubber is molded for any product
- DLA is actually the last stop for Bradley track when where DLA dip the track in preservative and then packages them for shipment
- TARDEC ICW Yuma will certify the new funded bed test track is capable of accepting M1

DLA - 680,000 ft² covered / 52 doors

- Receiving is 17 doors

- conveyor system

- AMCRSS / DSS is how they integrate shop orders to the floor

recipients
& shop orders

- about 50% by

- other sources about 25%

- DLA is about 25%

workforce is about 87% Texas, 13% Arkansas

Munitions Center

- no more than 2% of Patriot can fall out after the initial production
- provide all the world wide certification support for Patriot
- ~~provide all the world wide certification support for Patriot~~
- check into LEED & ISO 9000 capabilities
- facility for Patriot is closing and moving to Japan
- certification period for Patriot is 15 years
- Patriot missiles that remain in Germany will be shipped to and processed by RRAD Munitions Center
 - NSMMA has some capabilities for Patriot but not to this level of certification
- only Patriot capability outside NSMMA facility

- all venue that has happened from BRAC 95 is directly related to RRAD
- RRAD fire department is the designated first responder for all local communities w/ volunteer fire depts.

Recommendations

DLA -

- - where does the DLA class VII go?
 - all associated inventories?
 - cost of about \$14M to move supplies in CBRA
 - believe that is just for class IX
- - timeline is planned for bulk of move in F/09
 - MILCON at OK City, OK to house these supplies
 - but it looks as if that will be built in F/09
 - ⇒ how would all this fit / time the move and building

data on the number of doors that relates to capacity in CBRA was 37 instead of the actual 52 doors of capability

- impacts upon the cost to MILCON at OK City, OK
- building to be built is only about 60% of the size of the current facility
- SES scenario in Aug 04 wanted 4 SDP
 - San Jangui, Warner Robbins, Red River & Suquamah
 - in Feb 05 scenario 48 disestablished the Red River DDRT where Red River would be closed
 - 80% of omission is not RRAD related
 - other current SDP are stand alone in San Jangui and at Suquamah and are not located with any sort of maintenance facility
 - costs to operate a stand alone DDRT would not significantly increase
- - where did the tires privatization / compressed gas / PCL savings come from?
 - is it just based on receipt / store / issue for tires or did it consider the wheel / tire hit cost / omission?

→ looks like only about 65% of the needed space will be built
 → where will we try to store the 44% of needed storage?

- Spartan Rocket motors - 24 motors, 10,000 lbs of HE per motor -> Air Force owned assets
 - awaiting disposition from ARDEC as to what to do with these motors
 - DoD Explosives Safety Board monitors these
 - what happens to these if the RRMC does close?
 - highly unstable propellant
 - Air Force has agreed to pay for the demul, but how to demul is currently unknown
- if the recommendation includes the demul in place before closure, the demul could not be completed w/in the BRAC implementation timeframe
 - would create a purchase issue with the local drinking water
- AMCOM missile demul is most of the demul w/d

RRAD

- was not given credit for RRMC, DDRT & RRAD synergistic installation
- 75% of people would be COBRA
 - in 1995 575 positions moved officially, but only 16% of the actual people moved
- uniqueness was given credit at other installations
 - Rubber products is the only DoD capability w/in DoD
 - Rock Island was given credit for the forge and WVA was given credit for gun tubes
 - => it would follow that RRAD should have been given credit for as a unique capability
- did not get credit for

Capacity

- build capacity at ANAD: LEAD to incorporate RRAD with
- 2.6 M DTH to one shift operation
- use forest to move in workload a 1 1/2 shifts
- this is a variance 127 B notes that what's the
- wait is at 1 1/2 shifts

- claim of RRAD did not eliminate any excess capacity
- and only generate work for the thing
- EOH will supply based on vehicle quantities
- expected for H/06 = 07
- problem if quality may never be satisfied
- how does this case on the overload?

- COBRA than a 30% BOS savings by clearing
- RRAD - how can this be?

- pay back in years instead of longer
- pay back seems reduced

- when is the MILCOR at MCAR for the Patent?
- when is the MILCOR at MCAR for the Patent?

- in the recommendation commission's impacts whether
- a basis of additional mitigation measures

- there is a plan for which to determine what
- any issues might be but no costs

- how does any consideration given w/in military value to
- CITE designations?

- were there any occasions reported that military Army or other
- service workload to the current operating CITEs

3710 total government no of 6/17/05

113 Munitions center
614 DA

- 2985 RRAD paper

Formatic

- plan for H06 is for all Bradley tank remaining activity to be done at RRAD instead of a RRAD/depot split

- how do these costs compare to what's in CBRRA

- 249M to move the subter facility to ANRAD

- 150M to move the Patient to ANRAD

- inventory is certified every year

- Patient identification is every 18 years, about 70% of the

- in RRAD the only DA facility that does the kits w/o the DOD? only spare sources?

- does this conflict w/ DOD's plan that unprocessed to DA? DOD 92 from 1992

- how does ANRAD change that workload?

- preservation matters continue at ANRAD

- How does this relationship when DA finishes the matter take into consideration?

- is the cost to move this included in CBRRA or located in RRAD?

Gen Hill - what will happen to the FMUC part that is

21 Jan 05

Failure to meet performance
located in RRAD etc to not
part of the unprocessed etc

- # of partnerships & # value
 - % of workload by source
 - RRMV breakout of workload broken out by source
 - package of info provided to GAO
 - list of tenants & personnel at each organization
 - 1/2M & 5/2M costs for more TRAD & Pattern
- FRND will want

When will all this stuff go at ANAD
 did TABS look at RRD / RRMV / PDRT as an
 location or 3 separate?

John
 GAO 1/11

- 124,960 bin locations, all bar coded
- 14,762 pallet rack locations
- all floor space can be used for any storage, no weight limits for any storage
- BRAC S&S group had proposed making RRAD DDRT a Strategic Distribution Platform until they approved the recommendation to close RRAD
 - = RRAD closure drove the DDRT move to TAFE AFB, OK
- all supply system requisitions come through the DDRT
 - even for the bean feeder shop
- shipping has 64 chutes and could support 64 customers with a dedicated chute for each customer
- average 2700 MROs / day
- DDRT does all the receipt / store / issue of MROs once it becomes a distribution issue
 - have about 700,000 ft² dedicated to tires
 - storage, tire / wheel assembly
 - HEMTT, HMMWV, 900 series ~~VAD~~ trucks, 800 series trailers
 - HET tractor and trailer
- can off load 28 rail cars at a time
- have 570 ton lift capacity in building 595 which is an extension of the rubber facility
 - automated track dipping facility that applies the track / rubber preservatives for all track

do the
kitting
job

- does the fire mission privatization recommendations include the fire kit / assembly mission
 - Theater will not want to revert to assuming that role
 - casualties = the danger of split time
- there does not appear to be the cost to establish the ^{what used / work} ~~the~~ preservation mission of the DPRT at any other facility
 - is this in the MILCON to rebuild and establish this capability at ANAD?
- there is no mention of what would happen to the DLA routers and hubs currently on RRAD DPRT

Munitions

- surplus munitions storage capacity
- DA utilization goal is 85% for 15% surge availability
- ~~surplus munitions~~
- no discussion of the kind of storage required (CAT 1, CAT 2)
- where will retrograded munitions go when they return?
- Munitions personnel are already on the MCAAP TDA
- demil work is done at RRMC
- beginning in FY06 Stinger Stockpile reliability workload is scheduled to begin at RRMC
 - This would fit in w/ the Choppal program
- FMS workload was not considered as part of the RRMC workload
 - => why not?
 - FMS support for Hawk, Patriot & Choppal

what about RRAD
 owned facilities
 Koval (MMS)
 Koval (MMS)
 hand

- outyear Brady wkld was not taken into consideration
 - RECAP upgrade & UDLP partnership
- Raytheon PPP has expanded under a direct costs relationship for Patriot
- => there would have been more military value assigned to RRAD for having these partnerships - criteria #23
- metropolitan statistical area - Bowie & Miller
 - this classifies RRAD as an urban area according to the Census bureau database
 - being "urban" lowers the military value, based on urban congestion, sprawl and connectivity issues
- criteria #37 is military value - brigade training space
 - ~~the~~ certified data input was 0, so how was the value listed there derived for all of the depots
- criteria #6 for military value - restricted airspace
 - if you had restricted air space you got credit for having it
 - RRAD has no restricted airspace
 - how was this interpreted?
 - airspace for training?
 - ANAD & LEAD got credit for restricted airspace which is restricted because it cannot be flown into ^{intended for air space} for training
 - how was airspace treated, scored & interpreted?
- difference between RRAD & LEAD is only .08 on the final roll up of military value
- RRAD did not get any credit for the jointness which occurs
 - M1 road wheels are for all sources

13 tenants on RRW

* - will Patriot go to MCAAP or LEAD?

- Storage?
- maintenance?
- certification?

- maintenance depot proper is about 1M ft²

~~see charts for statistics~~

see charts for statistics

18316 are complete

Bradley transmission bearings tolerance is 1 / 1,000,000

- we manufacture all 4 variants of the transmission
- commercial industry does not have this capability
- ECB will ~~be~~ be the new single variant transmission for all Bradley configurations

- RRAD is in the process of moving their drive to the new config and can currently work the ECB Electronically Controlled B model

- RRAD reported processes / resources / experiences for LEAD & Main enabling LEAD & MMA to be immediately successful

- 17 / 18 vehicles per day. Through d/g a MMWU Recop
- assembly is still on a one shift operation
- part in on a 3/shift operation. clearing too
- efficiencies gained have enabled RRAD to go from a 2 shift operation to a 1-shift operation and produce more vehicles
- LSI does the body repair
- work station moves every 30 minutes as tasks are completed
- RRAD desired their own plant to enable line movement a body shop/assembly

- about 80% of workload goes off pat
- BRAC was the first of SDR centers
- 1 part 60th and part in / RRAD on parting
- do the usual DR acceptance
- Guide about 4/6 parts/work for equipment
- do a lot of hitting of him = shipping the entire tree from
- SDR documents about RRAD were with BRAC working groups
- the DIRT moves away because RRAD close

DLA - DDIRT

LEAD down
- deadline was 2002

FORSCAL want quality
- originally began as part of the VREP FMAC initiative
- RRAD was for many capabilities - do program body work

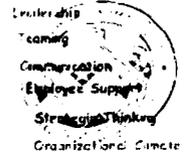
- want operation are at one shift
- DIRTs don't have the regular maintenance program & it get
- what day day w/ HRMUN
- 2.7M DIRT expected to date as of 13 June 05

BY 05 to date
- "new normal" annual DIRT for RRAD as 2.8.3.2 after all RESET & explicit
- partnership w/ CDLP in Bradley Keep cover use to AS
- LEAD manufacturing will be Bradley manufacturing
work to RRAD



**ITINERARY FOR
BRAC COMMISSIONER**

HONORABLE JAMES H. BILBRAY



ADDITIONAL VISITOR(S)

Mr. Gary Dinsick, Civilian, WSO-BRAC
 Ms Deirdre M. Walsh, Congressional Affairs
 House Liaison BRAC Commission
 Mr. Robert McCreary, Dir for Communications
 BRAC Commission
 Ms. Marjorie Chandler, US Rep. Hall Staff Member
 Mr. Brent Talley, US Rep Ross Staff Member
 Mr. John Etue, Senator Hutchison Staff Member
 Ms. Gail Green, Senator Cornyn Staff Member
 Mr. Ed French, Senator Lincoln Staff Member
 Mr. Randy Massanelli, Senator Pryor Staff Member
 Mr. Travis Ransom, Staffer. Senator Eltife
 Judge James M. Carlow, Bowie Cty Judge
 Rep Stephen Frost, TX State Representative (D/TX)
 Mr. Jerry Sparks, Texarkana Chamber of Commerce
 Mr. John Jarvis, Texarkana Chamber of Commerce

LODGING

(26 Jul 05, 0830)

**Four Points Sheraton Hotel
 5301 North State Line Avenue
 Texarkana, TX 75503
 Phone: (903) 792-3222**

Commercial Air:

*GARY DINSICK
 703 675 4006*

DRESS:

**Military - BDUs
 Civilian - Business Attire (Comfortable, closed-toe shoes)**

PROJECT OFFICER

COL Douglas J. Evans
 Cdr, RRAD

ESCORT OFFICER

Mr. Dennis L. Lewis
 Chief, Integrated Business Mgt Ofc

PROTOCOL OFFICER

Ms. Norma Smith
 RRAD Protocol Officer
 Office: DSN 829-2316
 Cell Phone: (903) 278-8759

Wednesday, 27 July 2005

TIME

ACTIVITY

CONTACT

0900

COL Evans; Mr. George Montgomery, Deputy Cdr;
 SGM Dennis Miller, Depot SGM; Mr. Jimmy Shull,
 Chief of Staff, RRAD; LTC Betty Yarbrough, Cdr
 Defense Distribution Depot (DDRT); Mr. Kirk Zachry,
 Deputy Cdr, DDRT; Mr. Harrell Hignight, Director Red River
 Munitions Center; Mr. Patton Tidwell, Deputy Director for
 Operations, RRAD; Mr. Paul Addington, Director for Public
 Works, RRAD; Ms. Brenda Crow, Chief, Systems Support Office,
 RRAD; Mr. Lewis, and Ms Smith - Depart RRAD to pick up
 Commissioner Bilbray and Commission Staff Members.
 Enroute to Four Points Sheraton Hotel, 5301 North State Line.

COL Evans

0900-0930

- 0930-0945 Introductions of Official Party and Collect Baggage
(NOTE: Congressional and Community Leaders Meet at the Hotel).
- 0945-1015 Enroute to RRAD. Enter Red River Commerce Gate, (Old Main Gate) and turn left (East) onto Texas Avenue.
- 1015-1100 Tour Tactical & Combat Vehicle Pdn Lines, Mr. Lewis
Bldg 345. Enter NW door (start of HEMTT Line), met by
Mr. Cleophus Yarber, Director for Operations; Mr. David May,
Chief, Hvy Tactical Div. Tour HEMTT Line.
Walk to NE corner stairwell. Met at top of stairs by Mr.
Chester Gordon, Dep Dir of Operations for Production, and
Tour BFVS Transmission Rebuild. Exit top floor via NE corner
stairs. Walk to HMMWV Recap line. Tour HMMWV Recap and
Exit SE door of Bldg 345 (by the elevator).
- 1100-1105 Travel N to Texas Avenue. Turn right (East) onto Texas Ave and
Proceed to Avenue K. Turn right (South) onto Avenue K and
continue to Rubber Products, Bldg 493.
- 1105-1130 Met at West door of new Fluidized Bed by Mr. Danny Mr. Lewis
Martin, Chief, Rubber Products Division. Tour Fluidized
Bed facility. Exit West door and walk to SE corner door of
Bldg 493. Tour remainder of Rubber Products Division and
exit North door of Bldg 493. (LTC Yarbrough and Mr. Zachry
meet tour at Bldg 493, North door)
- 1130-1200 Driving tour of DDRT and tour Bldg 595. Turn right (North) on Ave K
to 5th Street. Turn right (West) on 5th Street to E Dock 535 Rd.
Turn right (North) side of Dock 535, then left (West) to Ave A.
Turn right (North) on Ave A, turn left (West) at hardstand and circle hardstand.

Travel to and tour Track & Roadwheel Preservation, Bldg 595. Turn
right (West) on 10th Street and return to DDRT HQ. Driving tour around
Bldg 499 and return to 10th Street. Continue on 10th Street and pull
into parking lot on West end of Bldg 499. Enter Cafeteria via NE
door.
- 1200-1300 Lunch, DDRT Conference Room, Bldg 499. Menu: Chicken Salad
Sandwich, Chips, Pickle Spear, Beverage, Cookies. Price: \$6.50.
- 1300-1315 Tour DDRT Distribution Center.
- 1315-1325 Enroute to TRMD, Bldg 1174. Return to 10th Street and turn right
(South) onto Ave I to 8th Street; Right (West) on 8th Street to Ave K;
Right (South) on Ave K to Old Boston Road. Proceed on Old Boston
Road to Bldg 1174, South entry.

Tour TRMD (met by Mr. John Hansen, Dir for TRMD).
Upon completion of tour, exit North door.

Mr. Lewis

1340-1415

Enroute to hotel. (Take Old Boston Rd back to Ave K.
North on Ave K to Texas Avenue. Turn left (West)
on Texas to red light. Turn right (South) at red light and exit the depot Main
Gate to Hwy 82. Travel to red light in Hooks, TX and turn left for Interstate
access.

Bus Seating:

Mr. Gary Dinsick, Civilian, WSO-BRAC
Ms Deirdre M. Walsh, Congressional Affairs
House Liaison BRAC Commission
Mr. Robert McCreary, Dir for Communications
BRAC Commission
US Rep Ralph Hall, R/TX
Mr. Hammond Fender, US Rep. Hall Staff Member
Mr. Brent Talley, US Rep Ross Staff Member
Mr. T. J. Stapleton, Senator Hutchison Staff Member
Ms. Gail Green, Senator Cornyn Staff Member
Mr. Ed French, Senator Lincoln Staff Member
Mr. Randy Massanelli, Senator Pryor Staff Member
Mr. Travis Ransom, Staffer. Senator Eltife
Judge James M. Carlow, Bowie Cty Judge
Rep Stephen Frost, TX State Representative (D/TX)
Mr. Jerry Sparks, Texarkana Chamber of Commerce
Mr. John Jarvis, Texarkana Chamber of Commerce
COL Douglas Evans, Commander, RRAD
Mr. George Montgomery, Deputy Commander, RRAD
LTC Betty Yarbrough, Commander, DDRT
Mr. Kirk Zachry, Deputy Commander, DDRT
Mr. Harrell Hignight, Director, Red River Munitions
SGM Dennis Miller, Depot SGM
Mr. Jimmy Shull, Chief of Staff
Mr. Dennis Lewis, Chief, Integrated Business Mgt Ofc, RRAD
Mr. Patton Tidwell, Deputy Director for Operations, RRAD
Mr. Paul Addington, Director for Public Works, RRAD
Ms. Brenda Crow, Chief, Systems Support Office, RRAD
Ms. Norma Smith, Protocol Officer, RRAD

	ITINERARY FOR BRAC COMMISSIONERS GEN JAMES T. HILL, USA, RET BG SUE E. TURNER, USAF, RET	
<u>ADDITIONAL VISITOR(S)</u> Mr. George Delgado, BRAC Analyst Ms. Liz Bieri, BRAC Analyst Mr. Aaron Butler, BRAC Analyst <u>DRESS:</u> Military - BDUs Civilian - Business Attire (Comfortable, closed-toe shoes)	<u>LODGING</u> (Revised 20 Jun 05 0530) 4 Points Sheraton Hotel 5301 North State Line Ave Texarkana, TX Phone: (903) 792-3222	
<u>PROJECT OFFICER</u> COL Michael Cervone Cdr, RRAD	<u>ESCORT OFFICER</u> Mr. Dennis Lewis Chief, Integrated Business Mgt Ofc	<u>PROTOCOL OFFICER</u> Ms. Norma Smith RRAD Protocol Officer Office: DSN 829-2316 Cell Phone: (903) 278-8759

Tuesday, 21 June 2005

<u>TIME</u>	<u>ACTIVITY</u>	<u>CONTACT</u>
0950-1020	COL Cervone; Mr. George Montgomery, Deputy Cdr; LTC Hugh Talley and Mr. Lewis enroute to 4 Points Sheraton Hotel, North State Line, to pick up GEN Hill, Mr. Delgado, Mr. Butler and Ms. Bieri.	COL Cervone
1020-1045	Enroute to Texarkana Regional Airport to meet BG Turner's 1103 flight.	
1045-1103	Awaiting arrival of flight.	
1103-1115	Collect luggage.	
1115-1145	Enroute to RRAD. Enter Red River Commerce Gate, (Old Main Gate) and turn left (East) onto Texas Avenue. Proceed to DPW Conference Room, Bldg 421.	
1145-1235	Luncheon and discussions. Attendees: GEN Hill, BG Turner, Mr. Delgado, Ms. Bieri, Mr. Butler, COL Cervone, Mr. Montgomery, Mr. Lewis, Mr. Patton Tidwell, LTC Hugh Talley, and Mr. Kirk Zachry. Menu: Turkey Club Sandwich, Chips, Pickle Spear, Beverage Cost: \$6.00.	

- 1235-1240 Enroute to Bldg 320 Conference Room.
- 1240-1340 Briefings. Attendees: See Note 1.
- (1240-1305) RRAD Briefing (presented by COL Cervone)
 (1305-1330) DDRT Briefing (presented by LTC Talley)
 (1330-1340) Discussion
- 1340-1345 Exit rear door of Bldg 320 and drive past vehicle display enroute to West door of Bldg 345.
- 1345-1425 Tour Tactical & Combat Vehicle Pdn Lines, Mr. Lewis
 Bldg 345. Enter NW door (start of HEMTT Line), met by Mr. David May, Chief, Hvy Tactical Div. Tour HEMTT Line. Walk to NE corner stairwell. Met at top of stairs by Mr. Chester Gordon, Dep Dir of Operations for Production and Tour BFVS Transmission Rebuild. Exit top floor via NE corner stairs. Walk to HMMWV Recap line. Tour HMMWV Recap and Exit SE door of Bldg 345 (by the elevator).
(Note 2 – Bus Seating List)
- 1425-1430 Travel N to Texas Avenue. Turn right (East) onto Texas Ave and Proceed to Avenue K. Turn right (South) onto Avenue K and continue to Rubber Products, Bldg 493.
- 1430-1440 Met at North door of new Fluidized Bed by Mr. Danny Mr. Lewis
 Martin, Chief, Rubber Products Division. Tour fluidized bed facility. Exit north door and walk to SE corner door of Bldg 493. Tour remainder of Rubber Products Division and exit North door of Bldg 493.
- 1440-1455 Travel to and tour DDRT, Bldg 499, Distribution Operations LTC Talley
 Center. Turn left (South) on Ave K to 8th Street. Turn right (West) on 8th Street to Avenue I. Turn Left (South) onto Ave I. Travel to 10th Street and North Center entrance of Bldg 499. Exit East Door of Bldg 499.
- 1455-1500 Enroute to TRMD, Bldg 1174. South on Avenue I to 8th Street. Right (West) on 8th Street to Ave K. Right (South) on Ave K to Old Boston Road. Proceed on Old Boston Road to Bldg 1174, South entry.
- 1500-1515 Tour TRMD (met by Mr. John Hansen, Dir for TRMD). Mr. Lewis
 Upon completion of tour, exit North door. Take Old Boston Rd back to Ave K. North on Ave K to Texas Avenue. Turn left (West) on Texas to red light. Turn right (South) at red light and exit the depot Main Gate to Hwy 82.

1515-1545

Travel to TAC Air terminal, Texarkana Airport. Turn right (East) onto HWY 82. Proceed to Hooks, TX, 1st red light. Turn Left (North) onto Main Street to I-30. Proceed on I-30 take and Loop 245 exit to US 67. Go straight across US 67 into the airport.

NOTE 1: Briefing Attendees:

Mr. T. J. Stapleton, US Senator Kay Bailey Hutchison Ofc (R/TX)
 Mr. Russell Thomasson, US Senator John Cornyn Ofc (R/TX)
 Mr. Randy Massanelli, US Senator Mark Pryor's Ofc (D/AR)
 Mr. Ed French, US Senator Blanche Lincoln's Ofc (D/AR)
 US Representative Mike Ross (D/AR) or staff member
 Mr. Hammond Fender, US Representative Ralph Hall's Ofc (R/TX)
 Steven Frost, TX State Representative (D/TX)
 Mr. Jonathan Black, TX Secretary of State's Ofc, or GEN Smith
 Mr. Travis Ransom, Senator Eltife's Ofc
 Mr. Jerry Sparks, Texarkana Chamber of Commerce
 Mr. John Jarvis, Texarkana Chamber of Commerce
 Judge Marion Carlow, Bowie County Judge
 COL Michael Cervone, Commander, RRAD
 Mr. George Montgomery, Deputy Cdr, RRAD;
 Mr. Jimmy Shull, Chief of Staff
 SGM Eric Kilianski, Depot SGM
 SGM Miller, RRAD SGM Designee
 LTC Hugh Talley, Cdr, DDRT (DLA)
 Mr. Kirk Zachry, Dep Cdr, DDRT
 Mr. Harrell Hignight, Director, Red River Munitions Center (RRMC)
 Ms. Donna Morris, RRMC
 Ms. Donna Westby, TACOM
 RRAD Command & Staff to include Union Representatives (18)
 (ONLY 1 rep per Dir and Ofc)
 Dr. Ron Higgins, Dir, ALLC
 Ms. Johnnie High, CPAC
 Mr. Patton Tidwell, Deputy Director for Operations
 Ms. Brenda Crow, Ofc of Commander
 Ms. Susan Smith, Directorate for Resources Mgt

Attendees Please Note: This is an official function. Dress is business attire.

Note 2: Bus Seating List:

GEN Thomas T. Hill
 BG Sue Turner
 Mr. George Delgado
 Ms. Liz Bieri
 Mr. Aaron Butler
 COL Cervone
 LTC Hugh Talley

Mr. George Montgomery
Mr. Kirk Zachry
Mr. Harrell Hignight
SGM Eric Kilianski
SGM Dennis Miller
Mr. Dennis Lewis
Mr. Patton Tidwell
Ms. Brenda Crow
Mr. Paul Addington
Ms. Norma Smith

Mr. T. J. Stapleton, US Senator Kay Bailey Hutchison Ofc (R/TX)
Mr. Russell Thomasson, US Senator John Cornyn's Ofc (R/TX)
Mr. Randy Massanelli, US Senator Mark Pryor's Ofc (D/AR)
Mr. Ed French, US Senator Blanche Lincoln's Ofc (D/AR)
US Representative Mike Ross (D/AR) or staff member
Rep Steven Frost, TX State Representative (D/TX)
Mr. Jonathan Black, TX Secretary of State's Ofc or GEN Smith
Mr. Jerry Sparks, Texarkana Chamber of Commerce
Mr. John Jarvis, Texarkana Chamber of Commerce
Judge James Carlow, Bowie County Judge

	ITINERARY FOR BRAC ANALYSTS MR. GEORGE DELGADO MS. LIZ BIERI MR. AARON BUTLER 20 June 2005	
<u>VISITOR(S)</u> <u>DRESS:</u> Military - BDUs Civilian - Business Attire (Comfortable, closed-toe shoes)	<u>LODGING</u> (Revised 17 Jun 05, 0840) 4 Points Sheraton Hotel 5301 North State Line Ave Texarkana, TX Phone: (903) 792-3222	<u>Commercial Air:</u> ETA - Sunday Evening, 20 Jun 05 ETD - Thursday, 23 Jun 05
<u>PROJECT OFFICER</u> COL Michael Cervone Cdr, RRAD	<u>ESCORT OFFICER</u> Mr. Dennis Lewis Chief, Integrated Business Mgt Ofc	<u>PROTOCOL OFFICER</u> Ms. Norma Smith RRAD Protocol Officer Office: DSN 829-2316 Cell Phone: (903) 278-8759

Monday, 20 June 2005

<u>TIME</u>	<u>ACTIVITY</u>	<u>CONTACT</u>
0730-0800	Enroute to RRAD, Conference Room, Bldg 320.	COL Cervone
0800-0915	Briefings. Attendees: <u>See Note 1.</u>	
	(0800-0810) Welcome & Admin Remarks (COL Cervone)	
	(0810-0830) RRAD Briefing (presented by COL Cervone)	
	(0830-0850) DDRT Briefing (presented by LTC Talley)	
	(0850-0930) Discussion	
0930-0945	Exit rear door of Bldg 320 and walk past vehicle exhibits. Walk to West door of Bldg 345.	
0945-1030	Tour Tactical & Combat Vehicle Pdn Lines, Bldg 345. Enter NW door (start of HEMTT Line), met by Mr. David May, Chief, Hvy Tactical Div. Tour HEMTT Line. Walk to NE corner stairwell. Met at top of stairs by Mr. Chester Gordon, Dep Dir of Operations for Production, and Tour BFVS Transmission Rebuild. Exit top floor via NE corner stairs. Walk to HMMWV Recap line. Tour HMMWV Recap and Exit SE door of Bldg 345 (by the elevator).	Mr. Lewis

- 1030-1035 Travel North to Texas Avenue. Turn right (East) onto Texas Ave and Proceed to Avenue K. Turn right (South) onto Avenue K and continue to Rubber Products, Bldg 493.
- 1035-1055 Met at North door of new Fluidized Bed by Mr. Danny Martin, Chief, Rubber Products Division. Tour fluidized bed facility. Exit north door and walk to SE corner door of Bldg 493. Tour remainder of Rubber Products Division and exit North door of Bldg 493. Mr. Lewis
- 1055-1100 Enroute to DDRT, Bldg 499, via Avenue K. Turn left (South) On Ave K to 8th Street. Turn right (West) on 8th Street to Avenue I. Turn Left (South) onto Ave I. Travel to 10th Street and North Center entrance of Bldg 499.
- 1100-1140 Tour of Bldg 499, Strategic Distribution Center escorted by LTC Talley, Cdr, DDRT, and Mr. Kirk Zachry, Deputy Cdr, DDRT.
- Exit Bldg 499 via East door. Driving tour of area. Return to 10th Street. Turn left (West) on 10th to Ave I. Turn left (North) on Ave I to 5th St. Turn left (West) on 5th to E Dock 60 Rd. Turn right (North) side of Dock 60, then left (West) on Combat Rd. Turn left (South) on Ave A. turn right (West) at hardstand and circle hardstand.
- Tour track & roadwheel preservation, Bldg 595. Turn right (West) on 10th Street. Return to DDRT HQ via 10th Street
- 1140-1215 Lunch.
- 1215-1225 Proceed to TRMD, Bldg 1174, via Avenue K. Turn left onto Old Boston Road and proceed to South entrance of Bldg 1174.
- 1225-1320 Tour TRMD, met by Mr. John Hansen, Dir for TRMD. Mr. Lewis
Upon completion of tour, exit North door Take Old Boston Rd back to Ave K. North on Ave K to Texas Avenue. Turn left (West) on Texas to red light. Turn right (South) at red light and exit the depot Main Gate to Hwy 82.
- 1320-1330 Travel to HQ Conference room.
- 1330- Continue discussions.

NOTE 1: Briefing Attendees:

Analysts

- COL Michael Cervone, Cdr, RRAD
- Mr. George Montgomery, Deputy Cdr, RRAD
- Mr. Jimmy Shull, Chief of Staff;
- SGM Eric Kilianski, Depot SGM
- SGM Miller, RRAD SGM Designee
- LTC Hugh Talley, Cdr, DDRT (DLA)
- Mr. Kirk Zachry, Dep Cdr, DDRT
- Mr. Harrell Hignight, Dir, Red River Munitions Center
- Mr. Paul Addington, Dir, Public Works
- Mr. Patton Tidwell, Deputy Dir, Operations
- Mr. John Hansen, Dir for Theater Readiness Monitoring
- Mr. Dennis Lewis, Chief, IBMO
- Ms. Donna Morris, RRMC
- Mr. Cleo Yarber, Dir for Operations
- Ms. Charlean Carroll, EEO
- Ms. Theresa Weaver, Dir for Resource Management
- Mr. Boyd Sartin, Transformation Coordinator
- Ms. Belinda Lee, Public Affairs Officer
- Ms. Brenda Crow, Ofc of Cdr
- Mr. Gayland Tidwell, DDRT
- Ms. Reon Hall, DDRT
- Ms. Norma Smith, Protocol Officer

**DEFENSE DISTRIBUTION DEPOT RED RIVER
WORKLOAD ANALYSIS**

Army	31,088	74.5%
Air Force	4,468	10.7%
Navy	1,938	4.6%
Marine Corps	2,647	6.3%
Other	1,591	3.8%
Total	41,732	100%

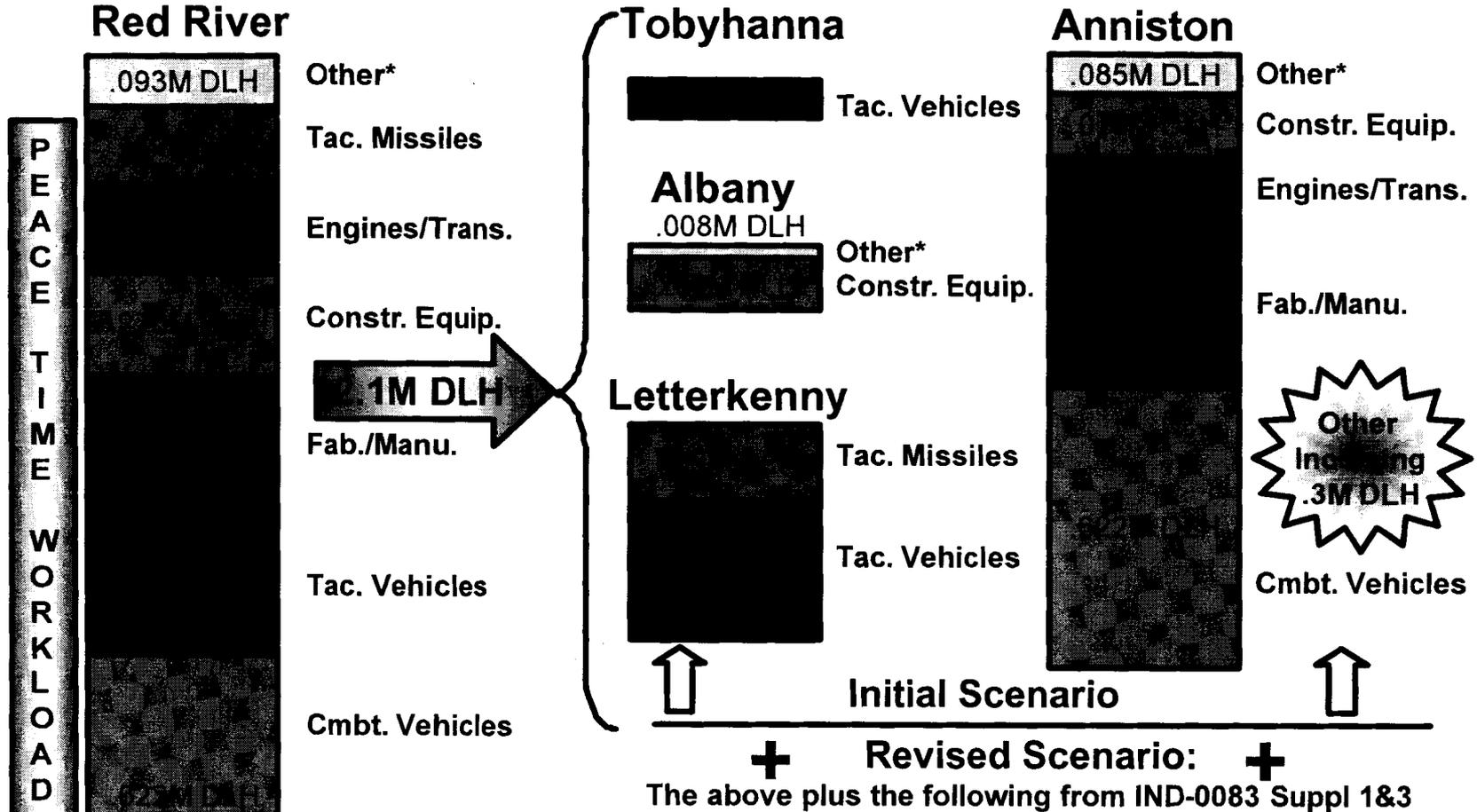
Rubber Products remanufacturing

NOMENCLATURE	CONTRACT COST	RRAD/UFC
M1 ROADWHEEL	\$545.07	\$267.47
BRADLEY	\$108.26	\$80.00
M113 FOV	\$66.12	\$60.40
M60 FOV	\$330.10	\$222.90

Draft Deliberative Document – For Discussion Purposes Only. Do Not Release Under FOIA



Red River Army Depot Closure Scenario (#0093)

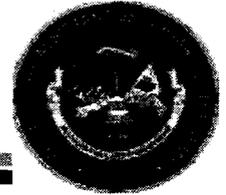


Adds 2.2M DLH combat vehicle capacity at Anniston

* Other = Pwrtrain Comp, Start/Alt/Gen, Armt & Struct Comp, Depot Fleet/Fld Spt, Fire Cntrl & Other



Candidate #USA-0036



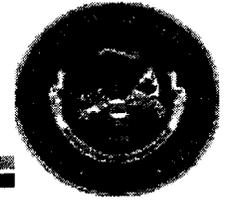
Candidate Recommendation: Close Red River Army Depot. Industrial JCSG realigns Munitions Center and Depot Maintenance and S&S JCSG realigns the DLA Distribution Center.

<u>Justification</u>	<u>Military Value</u>
<ul style="list-style-type: none"> ✓ Preserve and optimize depot maintenance capability while minimizing excess capacity ✓ Supports consolidation of workload into Army's Center for Industrial and Technical Excellence ✓ Industrial scenarios 0111 and 0127B realign the munitions center to enable depot closure. Scenario 0111 aligns DLA D 	<ul style="list-style-type: none"> ✓ Improves military value by moving functions to an installation with higher military value ✓ Red River MVI rated 3 (39) by JCSG. Depot Maintenance Center (MVI: Army (24), Leavenworth (39), Red River (39))
<u>Financials</u>	<u>Impacts</u>
<ul style="list-style-type: none"> ✓ Net Savings: \$387.5M ✓ Annual Recurring savings: \$56.6M ✓ Payback Period: 1 year ✓ NPV (savings): \$88.0M ✓ NPV (savings): \$761.8M 	<ul style="list-style-type: none"> ✓ Criterion 6 – Max potential reduction of 5,126 jobs (3120 direct and 2006 indirect) or 7.55% of the economic area employment ✓ Criterion 7 – Low risk; the trend of all attributes is to improve when moved to the other sites ✓ Criterion 8 – Moderate impact; Eight ranges and DERA sites (CTC \$48M) require cleanup

- | | | | |
|------------|---|-------------------------|----------------------------|
| ✓ Strategy | ✓ Capacity Analysis / Data Verification | ✓ JCSG Recommended | ✓ De-conflicted w/JCSGs |
| ✓ COBRA | ✓ Military Value Analysis / Data Verification | ✓ Criteria 6-8 Analysis | ✓ De-conflicted w/Services |



Red River Army Depot



- OSD and the IJCSG have agreed to relocating the depot functions from Red River but the following conditions must be met:
 - The IJCSG must submit a CR that creates 2.6M DLHs capacity at other depots
 - IJCSG must describe to Secretary of the Army the allocation of the 2.6M DLHs across Letterkenny, Tobyhanna, Anniston and Albany

BASE VISIT REPORT

RED RIVER ARMY DEPOT, TEXARKANA, TEXAS

JUNE 21, 2005

LEAD COMMISSIONER:

General James T. Hill (USA, Ret)

ACCOMPANYING COMMISSIONER:

Brigadier General Sue E. Turner (USAF, Ret)

COMMISSION STAFF:

Elizabeth C. Bieri (Army Analyst)
George M. Delgado (Joint Cross Service Analyst)
Aaron S. Butler (Army Associate Analyst)

LIST OF ATTENDEES:

COL Michael Cervone	Commander, Red River Army Depot (RRAD), 903-334-3111
Mr. George Montgomery	Deputy to the Commander, RRAD, 903-334-2102
LTC Hugh Talley	Commander, DDRT (DLA), 903-334-3167
Mr. Kirk Zachry	Deputy to the Commander, DDRT (DLA), 903 334-3167
Mr. Harrell Hignight	Director for Red River Munitions Center (RRMC), 903 334-2437
SGM Kilianski	Command Sergeant Major, RRAD, 903-334-2118
SGM Dennis Miller	Command Sergeant Major (select), RRAD, 903-334-2116
Mr. Dennis Lewis	Chief, Integrated Business Management Office, RRAD, 903-334-5046
Mr. Cleophus Yarber	Director for Operations, RRAD, 903-334-2104
Mr. Patton Tidwell	Deputy Director for Operations, RRAD, 903-334-5033
Ms. Brenda Crow	Office of Commander, RRAD, 903-334-2445
Ms. Norma Smith	Protocol Officer, RRAD, 903-334-2316
Mr. Jimmy Shull	Chief of Staff, RRAD, 903-334-3985
CPT Howard Matthews	JAG, RRAD, 903-334-3258
Mr. Joe Martin	Chief, Legal Office, RRAD, 903-334-3258
Mr. Myron Robinson	Director for Plans, Training, Mobilization, and Security, RRAD 903-334-3151
Ms. Belinda Lee	Public Affairs Officer, RRAD, 903-334-3143
Ms. Theresa Weaver	Director for Resource Management, RRAD, 903-334-3145
Mr. Boyd Sartin	Transformation Coordinator, RRAD, 903-334-2823
Ms. Susan Smith	Directorate for Resource Management, RRAD, 903 334-2647
Mr. James Heard	Director for Quality Assurance, RRAD, 903-334-2151
Mr. Paul Addington	Director, Public Works, RRAD, 903-334-3115

Mr. Cecil Johnson	Director for Information Management, RRAD, 903-334-3107
Mr. Robert McDonald	Director for Contracting, RRAD, 903-334-3989
Mr. Paul Ronan	Chief, Community and Family Activity Office, RRAD, 903-334-4019
Ms. Charlean Carroll	Chief, EEO Office, RRAD, 903-334-3444
Ms. Rita Wiggins	Director for MWR, RRAD, 903-334-3036
Mr. Johnnie High	CPAC, RRAD, 903-334-3617
Mr. John Hansen	Director for Theater Readiness Monitoring, RRAD, 903-334-3202
Ms. Donna Morris	Analyst, Red River Munitions Center, 903-334-2333
Ms. Sandra Moilaner	President, National Federation of Federal Employees, RRAD, 903-334-2240
Mr. Robert Tyson	President, Plumbers and Pipe Fitters, RRAD, 903-334-3543
Mr. Ron Starkey	National Federation of Federal Employees, RRAD, 903-334-5066
Ms. Donna Westby	BRAC Office, TACOM, 586-574-5088
LTC Joseph Tirone	Commander, Lone Star Army Ammunition Plant, 903-334-1207
HON Stephen J. Frost	TX State Representative, Texas House District 1, 903-628-8466
Mr. Russell Thomasson	US Senator John Cornyn's Office, Texas, 202-224-7847
Mr. T. J. Stapleton	US Senator Kay Bailey Hutchison's Office, Texas, 202-224-1689
Mr. Ed French	US Senator Blanche Lincoln's Office, Arkansas, 870-774-3106
Mr. Randy Massanelli	US Senator Mark Pryor's Office, Arkansas, 501-324-6336
Mr. Hammond Fender	US Representative Ralph Hall's Office, Texas, 4th, 202-225-6673
Mr. Marc McGough	US Representative Mike Ross's Office, Arkansas 4th, 870-887-6787
Mr. Bob Rasmussen	Analyst, Texas Secretary of State's Office, 512-463-5770
HON James Carlow	Judge, Bowie County TX, 903-628-6718
Dr. Ronald Higgins	Director, AMC Logistics Leadership Center, 903-334-2168
Mr. Ronald Henson	TX Military Affairs Preparedness Commission, 903-278-6359
GEN (ret) Michael Smith	TX Military Affairs Preparedness Commission, 512-463-8880
Mr. Jerry Sparks	Texarkana Chamber of Commerce, 903-792-7191
Mr. John Jarvis	Texarkana Chamber of Commerce, 903-277-8364
Mr. Tim Rupli	Consultant, Texarkana Chamber of Commerce, 202-669-2774

BASE'S PRESENT MISSION:

Red River Army Depot -- located 18 miles west of Texarkana, Texas, in the northeast corner of Texas -- is one of our nation's largest defense depots in terms of people and workload with a combined population of almost 2,822 employees including tenants. The workforce on the Red River complex is drawn from throughout the Four States region -- Texas, Arkansas, Oklahoma and Louisiana.

The depot's maintenance mission includes the repair, rebuild, overhaul and conversion of tactical wheeled vehicles, as well as the Army's light tracked combat vehicle fleet, including the Bradley Fighting Vehicle System, the Multiple Launch Rocket System, and their associated secondary items. Vehicles depart the depot's modernized maintenance facility in "like new" condition. Among their technical resources are the capability to design, fabricate and manufacture a wide

range of intricate items, ranging from specialty parts to unique prototype vehicles needed by customers.

The depot also serves as a vital ammunition storage center, with approximately 174,000 tons of ammunition valued at over \$5.3 billion in a 9,000 acre area. In this secured area, the primary activities are ammunition storage, renovation and demolition of conventional munitions, repair and storage of missile systems and receipts and shipment of stock to customers throughout the world.

Red River Army Depot is also the home of the Missile Recertification Directorate, a separate specialized activity that monitors and certifies the readiness of Hawk and Patriot missiles. The Army's only road wheel and track shoe rebuild and manufacture facility is located at Red River. The depot is host to ten tenant organizations, with the largest being the Defense Logistics Agency's Distribution Depot with about 1,000 employees that stores approximately 180,000 line items valued at over \$6 billion.

In recent years, Red River Army Depot has been recognized as a leader in developing and implementing quality-based processes into daily activities, as encouraged by the National Performance Review for all Federal activities. With its largely blue-collar workforce, the depot was a recipient of the National Partnership Award for 1996, reflecting the growth and involvement of the union-management partnership in effect at the base. Red River was also named one of 13 winners of the Army Communities of Excellence Award in 1996, and ACOE Runner-Up in 1998. RRAD earned a Quality Improvement Prototype Award from the National Performance Review in 1995. The awards are part of an on-going quality journey at Red River, intended to maintain the depot's position as a competitive industrial complex excelling in quality products and services to our customers.

Red River Army Depot was identified for realignment during the Base Realignment and Closure (BRAC) process in 1995. In its final action, as approved by the President and Congress, the BRAC Commissioners voted to maintain workload pertaining to the Bradley Fighting Vehicle System and Multiple Launch Rocket System at Red River. Other work scheduled to remain at the depot as a result of the BRAC decisions will include the ammunition storage and maintenance mission, the missile recertification mission, and the Rubber Products facility, which produces road wheels and trackshoes for armored vehicles.

SECRETARY OF DEFENSE RECOMMENDATION:

Close Red River Army Depot, TX.

1. Relocate the storage and demilitarization functions of the Munitions Center to McAlester Army Ammunition Plant, OK.
2. Relocate the munitions maintenance functions of the Munitions Center to McAlester Army Ammunition Plant, OK, and Blue Grass Army Depot, KY.
3. Relocate the depot maintenance of Armament and Structural Components, Combat Vehicles, Depot Fleet/Field Support, Engines and Transmissions, Fabrication and Manufacturing, Fire Control Systems and Components, and Other to Anniston Army Depot, AL.

4. Relocate the depot maintenance of Powertrain Components, and Starters/Generators to Marine Corps Logistics Base Albany, GA.
5. Relocate the depot maintenance of Construction Equipment to Anniston Army Depot, AL, and Marine Corps Logistics Base Albany, GA.
6. Relocate the depot maintenance of Tactical Vehicles to Tobyhanna Army Depot, PA and Letterkenny Depot, PA.
7. Relocate the depot maintenance of Tactical Missiles to Letterkenny Army Depot, PA.
8. Disestablish the supply, storage, and distribution functions for tires, packaged Petroleum, Oil, and Lubricants, and compressed gases.
9. Relocate the storage and distribution functions and associated inventories of the Defense Distribution Depot to the Defense Distribution Depot, Oklahoma City, OK.

SECRETARY OF DEFENSE JUSTIFICATION:

This recommendation supports the strategy of minimizing the number of industrial base sites performing depot maintenance for ground and missile systems. The receiving depots have greater maintenance capability, higher facility utilization and greater opportunities for inter-service workloading. This recommendation reinforces Anniston's and Letterkenny's roles as Centers of Industrial and Technical Excellence for Combat Vehicles (Anniston) and Missile Systems (Letterkenny).

This recommendation decreases the cost of depot maintenance operations by consolidation and elimination of 30 percent of duplicate overhead structures required to operate multiple depot maintenance activities. This recommendation also increases opportunities for inter-service workloading by transferring maintenance workload to the Marine Corps.

This recommendation relocates storage, demilitarization, and munitions maintenance functions to McAlester Army Ammunition Plant, and thereby reduces redundancy and removes excess from Red River Munitions Center.

This recommendation allows DoD to create centers of excellence, generate efficiencies, and create deployment networks servicing all Services.

This recommendation relocates the storage and distribution functions and associated inventories to the Defense Distribution Depot Oklahoma City at Tinker Air Force Base. It also contributes to the elimination of unnecessary redundancies and duplication, and streamlines supply and storage processes.

The disestablishment of the wholesale supply, storage, and distribution functions for all packaged POL, tires, and compressed gas products supports transformation by privatizing these functions. Privatization of packaged POL, tires, and compressed gas products will eliminate inventories, infrastructure and personnel associated with these functions and products.

MAIN FACILITIES REVIEWED:

- Building 345, Tactical and Combat Production Lines

- Building 493, Rubber Products
- Building 499, Defense Distribution Depot Red River Texas (DDRT) Distribution Operations Center
- Building 1174, Theater Readiness Monitoring Directorate (Missile Certification)

KEY ISSUES IDENTIFIED

1. If approved, the timing and implementation of this recommendation will be critical given the MILCON projects at several gaining installations and the time required to establish and prove out those facilities at each new location.
2. With the expectation that most personnel will not relocate to any of the gaining installations, there will be a significant loss of intellectual capital related to those weapon systems and capabilities.

INSTALLATION CONCERNS RAISED

A copy of the installation briefings will be included with this report.

1. With the recommendation to move the DLA facility there is a cost of about \$14M in COBRA to move supplies from Red River to Tinker AFB. Is that just for the Class IX supplies? Is that all associated inventories? Where will all of the DLA Class VII stocks go?
2. The timeline for the DLA move is planned mostly for 2009 with MILCON dollars in COBRA in 2009. What is the planned timing and integration for this move? There are currently 4 million square feet of covered storage at Red River DDRT and it appears that the building to be built in Oklahoma will only be about 60% of that size. Where will all the assets go that are currently stored at RRAD?
3. The COBRA data erroneously lists the number of doors at the DDRT as 34 instead of the actual 52 doors. Does this have any impact to the planned COBRA MILCON at Tinker AFB? Does this impact military value?
4. Supply and Storage scenarios in August 2004 planned for four Strategic Distribution Platforms (SDP) - San Joaquin, Warner Robbins, Red River and Susquehanna. In February 2005 Scenario 48 disestablished the Red River location with the closure of Red River Army Depot. It was stated that 80% of the DDRT mission is not related to the Red River Army Depot, and the two remaining SDP of San Joaquin and Susquehanna are not collocated with any maintenance facility. Why did the S&S group decide to close the Red River DLA operations? Could it not have remained a viable operation even without the maintenance depot?
5. What is the genesis of the recommendation to privatize tires, POL and compressed gasses? Does this impact just the storage, receipt, and issue of tires? Does it take into consideration the Red River DLA mission to kit tires for shipment to Theater? Will Tinker AFB assume the mission to kit and ship kitted tires, or is the intent for the Army to no longer ship kitted tires to the Theater?
6. The DDRT is actually the last step in the road wheel and track process with their application of the preservative and bundling missions as was directed by Defense Reform Initiative Directive (DRID) 1992, but there does not appear to be any cost in COBRA to recreate this mission at Anniston Army Depot. How will Anniston execute and finalize this portion of the rubber mission? Is this cost included with the MILCON for the rubber facility? Will the Supply and

Storage DLA recommended moves impact the ability of the Anniston DLA facility to execute this mission? Does this conflict at all with DRID 1992 that pushed this mission to DLA?

7. Within the COBRA there is no discussion of the type of munitions storage that will need to be built at McAlester, i.e. Category 1 and 2 storage igloos for missiles. How is this mission integrated into the existing McAlester infrastructure?

8. Beginning in FY06 Stinger stockpile reliability workload is scheduled to begin at the Red River Munitions Center (RRMC). Where would this workload now be performed?

9. The projected FMS support for Hawk, Patriot, and Chaparral is approximately a 10-year workload. How was U.S. support to Foreign Military Sales (FMS) workload considered in the evaluation of workload? Does this mission transfer to one of the gaining installations?

10. How were the RRMC facilities in Weilerbach, Germany, Korea, Kuwait and Israel incorporated into the evaluation of the installation? If they were not considered, why not?

11. Does the recommendation assume demilitarization of assets in place? The depot reports that the demilitarization of all assets could not be completed within the BRAC implementation timeframe. Does some of this demilitarization workload move? Where?

12. How was Red River Army Depot given credit for the relationship between the Army Depot, Munitions Center, and Distribution Depot? Was this considered as one location, or three separate stand alone activities? If these relationships were not considered, why were they not considered? How was the Lear Siegler facility taken into consideration?

13. The standard factor in COBRA is that 75% of the personnel will relocate, however, the installation quotes that only 16% of previous personnel relocated with BRAC 1995. Was any consideration given to changing this standard factor for this recommendation based on previous Red River history? If not, why not?

14. It appears that other installations were given credit in military value for unique one-of-a-kind capabilities - Rock Island's foundry and Watervliet's gun tubes capabilities. How was the rubber facility uniqueness within the DoD incorporated into the Red River military value? If not, why was it not considered?

15. How was the upcoming Bradley partnership workload incorporated into the evaluation? If not, why was it not incorporated? What is the funded Bradley workload in dollars and quantities that is planned for Red River Army Depot for FY05-11?

16. There should have been more military value assigned to Red River in criteria 23 for having more partnerships. On what basis was the RRAD value determined for this criteria?

17. Within the Census Bureau database Red River is classified as an urban area which lowered the military value for this criteria, however, the installation claims this should be a rural area. How was the determination made that the area is urban?

18. Criteria #37 in the military value relates to brigade training space. For this element, all the maintenance depots forwarded a "0" input, yet there is a numerical answer for each installation. How was this value determined?

19. Criteria #6 relates to restricted airspace. What was the intended interpretation of this element? Was it airspace for training? Both Anniston and Letterkenny received credit for restricted airspace because they have airspace which cannot be flown into. How was airspace treated, scored and interpreted?

20. Red River did not get credit for the jointness which is there - they are the producer of M1 road wheels for all services. How was this factored in to the Red River value?

21. The recommendation builds 2.2 million direct labor hours of capacity at Anniston and .4 million direct labor hours of capacity at Letterkenny factored at a one shift operation, however,

- the scenario states that work is calculated at one and a half shifts. How does this recommendation eliminate excess capacity if it is being rebuilt at two separate locations?
22. How does this recommendation decrease the cost of depot maintenance operations by consolidation and elimination of 30 percent of duplicate overhead structures?
 23. Why is there no MILCON at McAlester for the Patriot program Category 1 and 2 storage igloos, and for other munitions?
 24. Was any consideration given within the military value criteria to installations with Title 10 U.S. Code 2474 Center for Industrial Technical Excellence (CITE) designations? If not, why not?
 25. Were any scenarios explored that migrated Army or other service workload to existing CITEs?

COMMUNITY CONCERNS RAISED:

1. Military value is the primary consideration to support the Combatant Commander; ignoring this constitutes a substantial deviation.
2. The Army must retain all depots to support the Warfighter.
3. The Industrial Joint Cross Service Group deviated from DoD parameters for capacity and "created" 2.6 million direct labor hours in Anniston and Letterkenny to permit closure over Army objections.
4. There is insufficient ammunition storage capacity within the Army to accommodate the Red River Munitions Center and Lone Star Ammunition Plant's current stored ammunition.
5. The top ranked Red River DDRT was slated for disestablishment due only to potential RRAD closure.
6. The economic impact from this closure would be devastating with a projected unemployment rate that exceeds 14%.

REQUESTS FOR STAFF AS A RESULT OF VISIT:

The installation will provide the following:

- Details of the estimated costs of \$150M to move the missile facility and \$50M to move the Rubber facility
- A list of all the tenants and the current staffing levels at each organization
- A complete package of all information provided to the Government Accountability Office as a result of their site visit in relation to BRAC 2005
- A breakout of Red River Munitions Center workload by Service and the equivalent percentages
- An updated number of partnerships and a brief description and dollar value of each partnership

Elizabeth Bieri/Army/25 June 2005
George Delgado/Joint Cross Service/25 June 2005