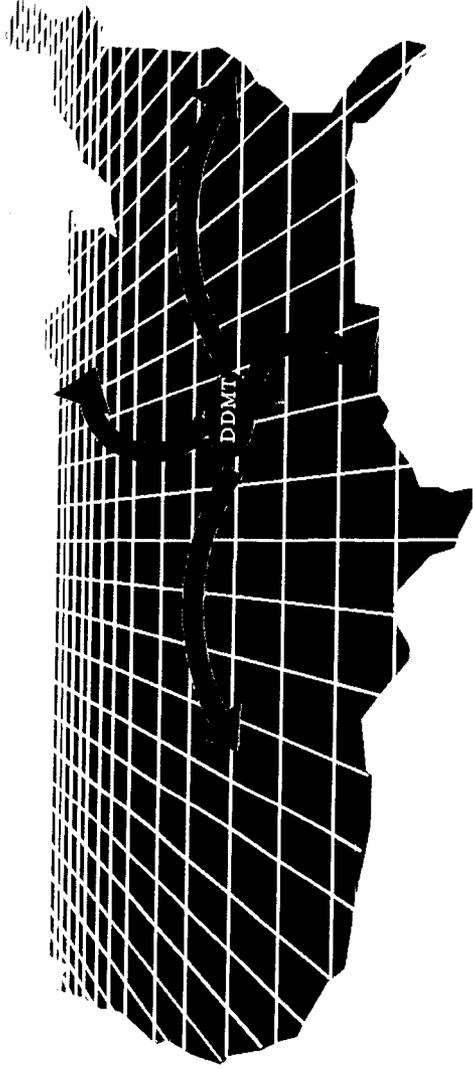


# Defense Distribution Depot Memphis Tennessee



# America's Distribution Center

A

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## ACRONYMS

### -A-

ACF	ATTAINABLE CUBIC FEET
ALOC	AIR LINE OF COMMUNICATION
AS/RS	AUTOMATED STORAGE AND RETRIEVAL SYSTEM
ATS	AUTOMATED TRANSPORTATION SYSTEM

### -B-

BMAR	BACKLOG OF MAINTENANCE AND REPAIR
------	-----------------------------------

### -C-

CCP	CONSOLIDATED CONTAINERIZATION POINT
CF	CUBIC FEET
COBRA	COST OF BASE REALIGNMENT ACTIONS

### -D-

DDAG	DEFENSE DEPOT ALBANY, GEORGIA
DDBC	DEFENSE DEPOT BARSTOW, CALIFORNIA
DDCO	DEFENSE DEPOT COLUMBUS, OHIO
DDHU	DEFENSE DEPOT HILL, UTAH
DDJC	DEFENSE DEPOT SAN JOAQUIN, CALIFORNIA
	(DDSC - Defense Depot Sacramento, California)
	(DDTC - Defense Depot Tracy, California)
DDJF	DEFENSE DEPOT JACKSONVILLE, FLORIDA
DDL P	DEFENSE DEPOT LETTERKENNY, PENNSYLVANIA
DDMT	DEFENSE DEPOT MEMPHIS, TENNESSEE
DDNV	DEFENSE DEPOT NORFOLK, VIRGINIA
DDOO	DEFENSE DEPOT OKLAHOMA CITY, OKLAHOMA
DDOU	DEFENSE DEPOT OGDEN, UTAH
DDRT	DEFENSE DEPOT RED RIVER, TEXAS
DDRV	DEFENSE DEPOT RICHMOND, VIRGINIA
DDSP	DEFENSE DEPOT SUSQUEHANNA, PENNSYLVANIA
	(DDMP - Defense Depot Mechanicsburg, Pennsylvania)
	(DDNP - Defense Depot New Cumberland, Pennsylvania)

## ACRONYMS

### -D- (Cont.)

DDST	DEFENSE DEPOT SAN ANTONIO, TEXAS
DDTP	DEFENSE DEPOT TOBYHANNA, PENNSYLVANIA
DDWG	DEFENSE DEPOT WARNER-ROBINS, GEORGIA
DORO	DEPOT OPERATIONS RESEARCH OFFICE
DOSO	DEPOT OPERATIONS SUPPORT OFFICE
DVD	DIRECT VENDOR DELIVERY
DWASP	DLA WAREHOUSING AND SHIPPING PROCEDURES

### -F-

FEDEX	FEDERAL EXPRESS
-------	-----------------

### -G-

GOCO	GOVERNMENT-OWNED CONTRACTOR-OPERATED
GPW	GENERAL PURPOSE WAREHOUSE

### -H-

HAZMAT	HAZARDOUS MATERIAL
--------	--------------------

### -L-

LTL	LESS THAN TRUCKLOAD
-----	---------------------

### -M-

MILCON	MILITARY CONSTRUCTION
MOWASP	MECHANIZATION OF WAREHOUSING AND SHIPMENT PROCESSING

### -N-

NON-MECH	NON-MECHANIZED
----------	----------------

## ACRONYMS

-O-

OCP OCCUPIED CUBIC FEET  
OEM OPERATING EQUIPMENT AND MECHANIZATION

-P-

PDA PROCUREMENT DEFENSE AGENCY  
PDS PRIMARY DISTRIBUTION SITE

-R-

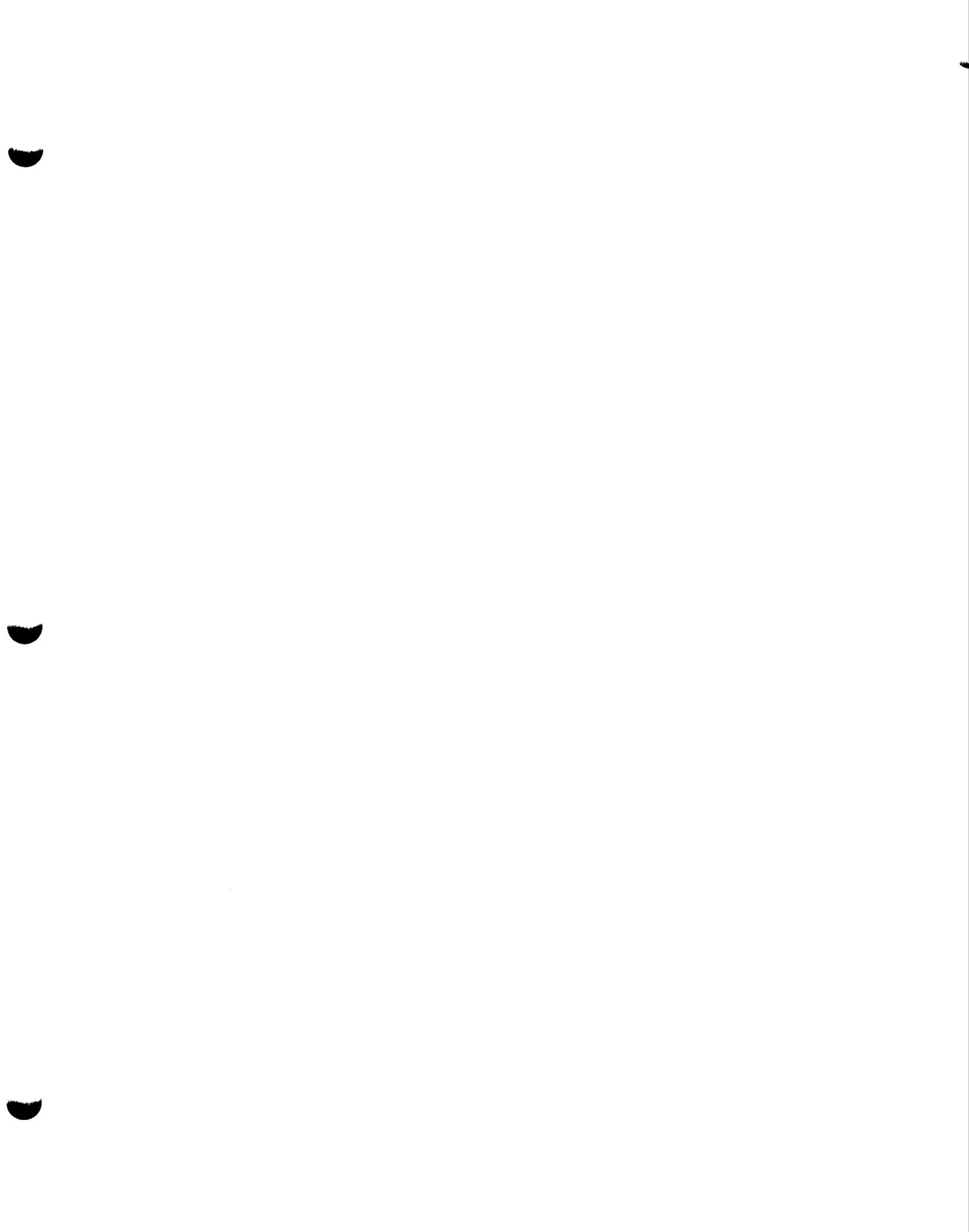
RPM REAL PROPERTY MAINTENANCE

-S-

SAILS STRATEGIC ANALYSIS OF INTEGRATED LOGISTICS  
SYSTEMS  
SAS STORAGE AID SYSTEM

-W-

WHSE WAREHOUSE



# **PRIMARY DISTRIBUTION SITES COMPOSITION/CHARACTERISTICS**

- MAJOR DISTRIBUTION FACILITY
  
- SUBSTANTIAL CAPITAL INVESTMENT
  - MECHANIZATION
  - STORAGE/THRUPUT CAPACITY
  - MAJOR TRANSPORTATION HUB
  
- MOBILITY SUPPORT
  - ACTIVE ITEMS (BIN/BULK)
  - SURGE CAPACITY
  - ABILITY TO ACCEPT DVDs
  
- PROVEN VALUE IN DESERT STORM
  - LINES
  - TONS
  
- DDMT MEETS PDS CHARACTERISTICS

**PRIMARY DISTRIBUTION SITE  
(DDMT)**



## PRIMARY DISTRIBUTION SITES

<u>CRITERIA</u>	<u>DDMT</u>		<u>DDSP</u>		<u>DDJC</u>	
			<u>DDMP</u>	<u>DDNP</u>	<u>DDSC</u>	<u>DDTC</u>
ACF STORAGE CAPACITY	51,330		38,832	47,570	32,173	50,332
AVG DAILY THRUPUT CAP	10,805		25,064		17,376	
BIN%	38%		76%		66%	
BULK%	62%		24%		34%	
CONSOLIDATION POINTS	ATS		CCP		CCP	
HIGHWAYS						
MAIN INTERSTATE	4		3		1	1
SPUR INTERSTATE	1		1		2	2
FOUR LANE	4		4		0	0
TWO LANE	2		4		0	0
PORT OF EMBARKATION						
AERIAL (Miles)	3	140	136		UNKNOWN	
WATER (Miles)	10	174	178		UNKNOWN	
AIRLIFT CAPABILITY						
PASSENGER (HUB/MILES)	MEDIUM/3	SMALL/16		SMALL/12	NONHUB/3	NONHUB/19
CARGO*	#1 WORLD WIDE					
PALLET	ALOC		ALOC		ALOC	
DESERT STORM						
LINES	892,061	677,671		N/A	687,064	
TONS	107,324	38,790		N/A	40,257	

\*FEDERAL EXPRESS  
 AIR NATIONAL GUARD  
 MEMPHIS INTERNATIONAL AIRPORT

SOURCE:  
 DLA Detailed Analysis  
 BRAC EG Minutes  
 BRAC Data Call  
 Support of Operation Desert  
 Shield/Storm, May 92

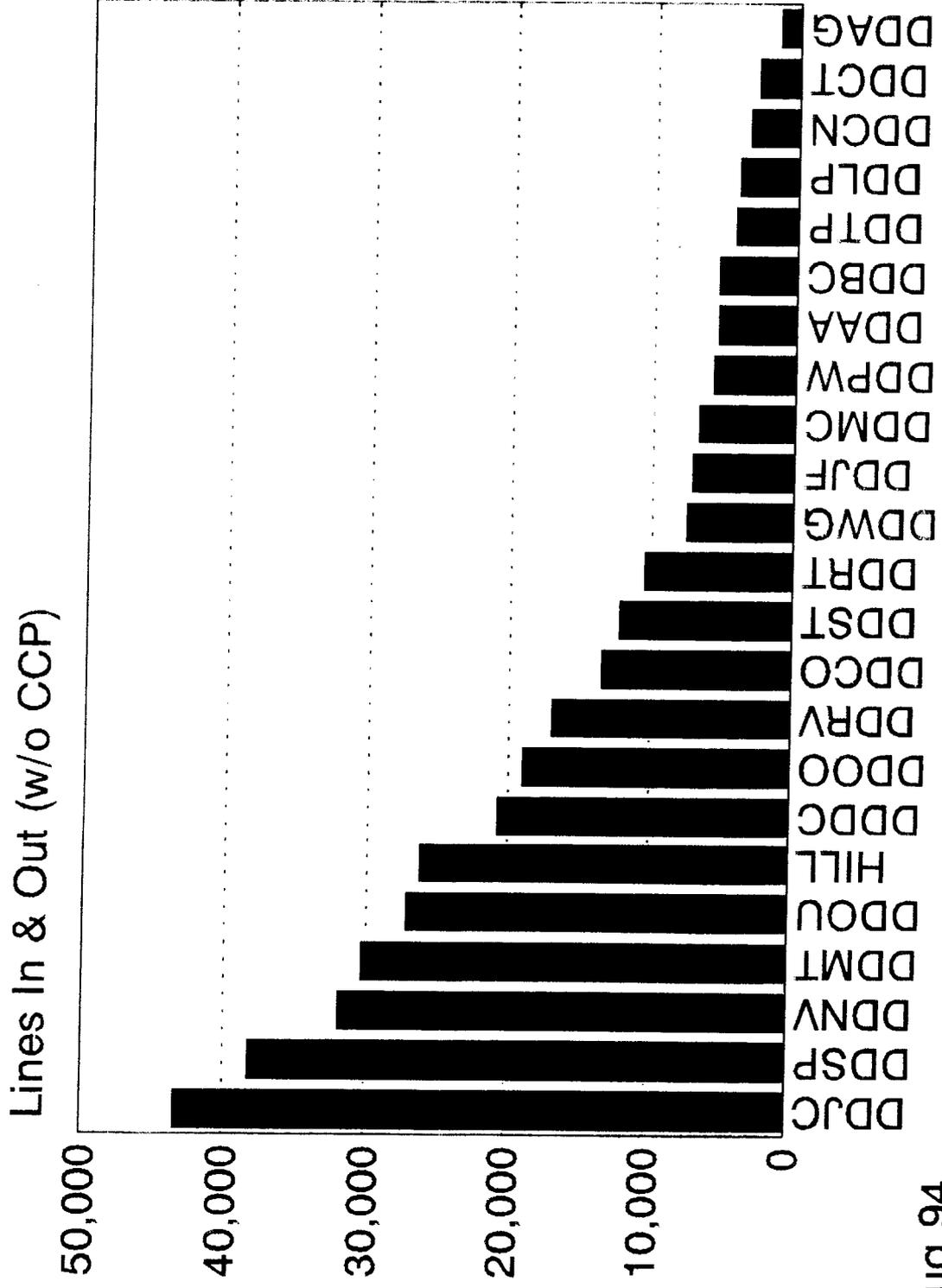


# THROUGHPUT CAPACITY

- **DDMT IS A HIGH VOLUME THROUGHPUT DEPOT**
- **DLA PROJECTED DDMT AS 3RD HIGHEST WORKLOAD IN THE AGENCY**
- **DESIGN SPECIFICATIONS INCREASES DDMT THROUGHPUT**
- **DDMT #1 IF DDSP AND DDJC WERE SEPARATED BY DEPOT**
  - **DDSP IS A MAKE-UP OF TWO DEPOTS, DDMP AND DDNP**
  - **DDJC IS A MAKE-UP OF TWO DEPOTS, DDSC AND DDTC**
- **WHY? FOR MAXIMUM DAILY THROUGHPUT**
  - **STAND ALONES USE SAME DORO/DOSO "ENGINEERED STANDARDS"**
  - **COLLOCATED USE DESIGN STANDARDS AND/OR MANUAL COUNTS**

# DEFENSE DISTRIBUTION DEPOTS

## THRUPUT CAPACITY



8 Aug 94

# DEFENSE DISTRIBUTION DEPOTS

## THRUPUT CAPACITY

<b>DDJC</b>	<b>43594</b>
<b>DDSP</b>	<b>38395</b>
<b>DDNV</b>	<b>32118</b>
<b>DDMT</b>	<b>30476</b>
<b>DDOU</b>	<b>27307</b>
<b>HILL</b>	<b>26360</b>
<b>DDDC</b>	<b>20904</b>
<b>DDOO</b>	<b>19114</b>
<b>DDRV</b>	<b>17113</b>
<b>DDCO</b>	<b>13610</b>
<b>DDST</b>	<b>12363</b>
<b>DDRT</b>	<b>10654</b>
<b>DDWG</b>	<b>7659</b>
<b>DDJF</b>	<b>7324</b>
<b>DDMC</b>	<b>6940</b>
<b>DDPW</b>	<b>5924</b>
<b>DDAA</b>	<b>5635</b>
<b>DDBC</b>	<b>5631</b>
<b>DDTP</b>	<b>4498</b>
<b>DDL P</b>	<b>4248</b>
<b>DDCN</b>	<b>3534</b>
<b>DDCT</b>	<b>2978</b>
<b>DDAG</b>	<b>1519</b>

## MAXIMUM SURGE THROUGHPUT CAPACITY

<u>DEPOT</u>	<u>ISSUES</u>	<u>RECPTS</u>	<u>TOTAL</u>	<u>TOTAL W/O CCP</u>
DDJC	18851	49095	67946	43594
DDSP	14574	47821	62395	38395
DDNV	3928	28190	32118	32118
DDMT	4386	26090	30476	30476
DDOU	2347	24960	27307	27307
DDHU	4500	21860	26360	26360
DDDC	3790	17114	20904	20904
DDOO	10375	8739	19114	19114
DDRV	3727	13386	17113	17113
DDCO	2383	11227	13610	13610
DDST	4150	8213	12363	12363
DDRT	1872	8782	10654	10654
DDWG	3102	4557	7659	7659
DDJF	2234	5090	7324	7324
DDMC	3139	3801	6940	6940
DDL P	2304	1630	3934	3934
DDBC	575	2776	3351	3351
DDTP	1072	1670	2742	2742
DDAG	617	902	1519	1519

FY93 MISSION WORKLOAD\*  
 COMPARED TO  
 FY96 & LATER MISSION WORKLOAD  
 (Line Items)

	RECEIPTS		ISSUES		TOTAL	
	FY 93	FY98+	FY93	FY98+	FY93	FY98+
DDRE:						
DDAA	139,934	110,240	222,442	175,240	362,376	285,480
DDAG*	91,341	71,958	130,787	103,034	222,128	174,992
DDCN+	205,287	205,837	416,525	460,474	621,812	666,311
DDCO	254,111	200,189	1,737,018	1,368,423	1,991,129	1,568,612
DDJF+	280,431	311,325	491,127	658,111	771,558	969,436
DDL P	258,810	203,891	405,512	319,462	664,322	523,353
DDMT+	270,569	259,534	2,938,144	2,453,012	3,208,713	2,713,346
DDNV+	1,050,028	868,734	1,925,585	1,641,543	2,975,613	2,510,277
DDRV	547,899	431,635	2,213,771	1,744,009	2,761,670	2,175,644
DDSP	938,917	739,679	4,607,733	3,629,972	5,546,650	4,369,651
DDTP	186,702	147,084	214,472	168,961	401,174	316,045
DDWG	508,959	400,958	875,814	689,966	1,384,773	1,090,924
DDCS	138,806	-	694,834	-	833,640	-
DDPF	313,313	-	329,925	-	643,248	-
<b>TOTAL DDRE</b>	<b>5,185,107</b>	<b>3,951,064</b>	<b>17,203,699</b>	<b>13,413,007</b>	<b>22,388,806</b>	<b>17,364,071</b>
DDRW:						
DDSC**	37,000	42,856	39,539	72,271	76,539	115,127
DDCT+	155,143	166,334	252,699	331,411	407,842	497,745
DDDC	392,893	336,936	1,168,443	1,002,742	1,561,336	1,339,678
DDOC	1,058,715	960,943	3,567,950	3,191,491	4,526,665	4,152,434
DDMC	502,299	395,711	802,465	632,182	1,304,764	1,027,893
DDOO	554,149	436,559	912,302	718,712	1,466,451	1,155,271
DDOO Ogden	373,590	294,314	2,182,949	1,719,727	2,566,539	2,014,041
DDOU Hill	404,313	318,518	733,292	577,687	1,137,605	896,205
DDPW+	85,940	74,557	437,323	365,084	523,263	439,641
DDRT+	314,754	297,656	1,075,783	996,583	1,390,537	1,294,239
DDST	465,409	366,649	1,421,246	1,119,658	1,886,655	1,486,307
DDDS	93,269	-	116,133	-	209,402	-
DDOC	170,329	-	589,221	-	759,550	-
DDOU Tooele	104,007	-	171,356	-	275,363	-
<b>TOTAL DDRW</b>	<b>4,711,810</b>	<b>3,591,033</b>	<b>13,470,701</b>	<b>10,727,548</b>	<b>18,182,511</b>	<b>14,418,581</b>
<b>TOTAL DLA</b>	<b>9,896,917</b>	<b>7,642,097</b>	<b>30,674,400</b>	<b>24,140,555</b>	<b>40,571,317</b>	<b>31,782,652</b>

\*These two depots currently are not under DBOF, FOB therefore does not consider their workload to be "mission" workload.

+Reflects receipts of workload from closed depots, in the FY 98+ workload.

Source: DLA Workload Projections 30 Mar 94

# DDMT THROUGHPUT MATERIAL HANDLING SYSTEMS

REVISED

## RECEIPTS

## ISSUES

<b>BIN:</b>	<b>CENTRAL RECEIVING</b>	<b>2,950</b>		<b>CENTRAL PACK</b>	<b>18,000</b>
				<b>MEDICAL</b>	<b>2,800</b>
<b>BULK:</b>	<b>BULK RECEIVING</b>	<b>1,266</b>		<b>CENTRAL PACK</b>	<b>3,200</b>
				<b>BULK PACK</b>	<b>850</b>
				<b>SHED</b>	<b>600</b>
				<b>SUBSISTENCE</b>	<b>200</b>
<b>HAZARDOUS:</b>		<b>168</b>			<b>392</b>
<b>CHILL:</b>		<b>2</b>			<b>48</b>
		<hr/> <b>4,386</b>			<hr/> <b>26,090</b>

**TOTAL LINE ITEMS THROUGHPUT: 30,476**

## ACTUAL THROUGHPUT CAPACITY

<u>CRITERIA</u>	<u>DDMT</u>	<u>DDSP</u>		<u>DDJC</u>	
		DDMP	DDNP	DDSC	DDTC
AVG DAILY THROUGHPUT CAPACITY	10,805		25,064		17,376
BIN	4,106		19,049		11,469
BULK	6,699		6,015		5,907
DESERT STORM					
LINES	892,061		677,671		687,064
TONS	107,324		38,790		40,257

Source:

DLA Detailed Analysis  
 Infrastructure Cost-Bin vs. Bulk Workload Percentages  
 Support of Operations Desert Shield/Storm, May 92

31 AUG 1994

CAAJ(BRAC) PAGE 2 CLOSE HOLD  
SUBJECT: Base Realignment and Closure (BRAC) 95 Data Call

c. If the answer for question VB44 and VB45 is yes, identify in your response net square feet, total cubic feet, and attainable cubic feet by fiscal year.

d. As indicated in Part IVA24b all Public Work Center (PWC) recommendations must be included in your response. Where you do not agree, your concerns need to be indicated in question IVA24d, and your rationale should be provided in IVA24h, as stated in the reference.

e. Question VB47 is rewritten as follows:

What is the depot's maximum daily throughput capability to include funded projects through FY 95 (using rated throughput for existing mechanization and design throughput for projects not operational). Subtract any active capability that is planned for removal. Capability should include fully staffed workstations utilizing a single 8-hour shift (give throughput in bin lines in and out and bulk lines in and out; collocated depots may also give eaches in and out). Report issues and receipts separately for each. Explain methodology. Do not include CCP, chill/freeze, and hazardous material. All workload that is not bin is considered bulk for this question. This question applies to a sustained capability over an extended period—not during surge. Source: Stand-alone depots use DORO/DOSO guidance. Collocated depots use legacy systems, design standards, and/or manual counts. The new suspense for this response is 3 Oct 94.

f. Question VB48 is rewritten as follows:

What is the depots' maximum surge throughput capability achievable to accommodate contingency mobilization using the requirements in question VB47 above with the exception of including CCP, chill/freeze, and hazardous where applicable. Provide a response for a single 8-hour shift and an authorized second 8-hour shift. This question is for surge capability (6 months or less), not continuous capability over an extended period of time. Source: Legacy system, manual counts, and historical data for past contingencies. The new suspense for this response is 3 Oct 94.

g. Some depots have had difficulty acquiring a timely response from their host on part IX (environmental) questions; therefore, the suspense for your part IX questions is now 14 Oct 94.

1 Encl

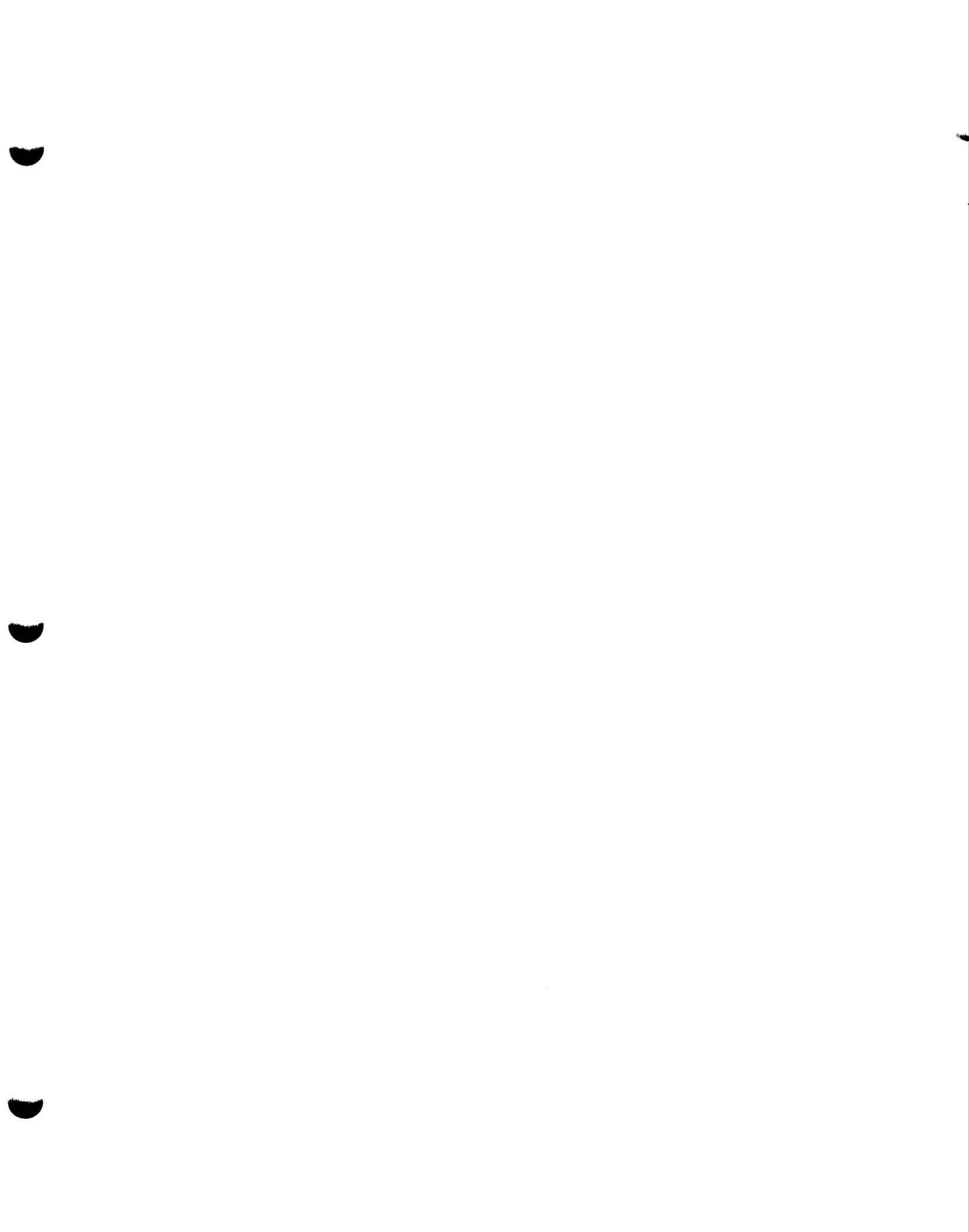
  
M. V. McMANAMAY  
Team Chief  
DLA BRAC

cc:

DDAA, DDAG, DDCO, DDCN, DDJF, DDLP, DDMT, DDNV, DDRV, DDTP, DDWG,  
DDBC, DDCT, DDDC, DDJC, DDMC, DDOO, DDOU, DDPW, DDRT, DDST, DDSP

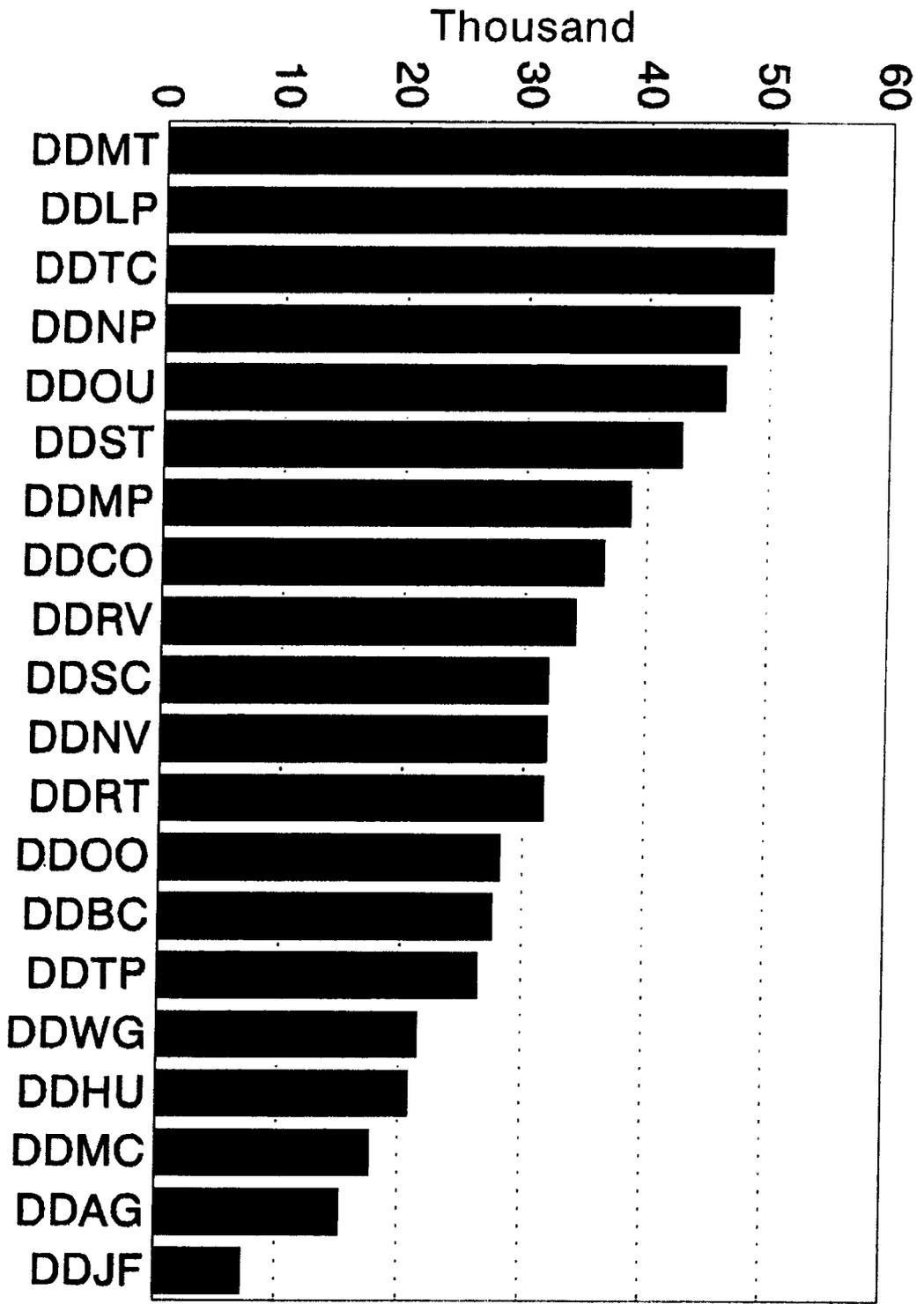
# **STORAGE CAPACITY**

- **BREAKDOWN BY INDIVIDUAL DEPOT**
- **DDMT HAS LARGEST STORAGE CAPACITY**



# TOTAL ATTAINABLE CUBIC FEET

Covered/Open (Improved) Storage



**STORAGE CAPACITY**

	<b>Total*</b>	<b>ACF Total Covered #22</b>	<b>Total Open (I) #22</b>	<b>Total Open (U) #22</b>	<b>Total All</b>	<b>OCF Total Covered #24</b>	<b>OCF I</b>	<b>OCF U</b>	<b>Total OCF</b>	<b>Total w/o (U)</b>
DDMT	51,330	33,980	17,350	2,010	53,340	28,373	6,489	2,010	36,872	34,862
DDL P	51,321	25,150	26,171	2,210	53,531	18,754	8,690	2,210	29,654	27,444
DDTC	50,332	34,838	15,494	862	51,194	34,838	15,494	862	51,194	50,332
DDNP	47,570	31,950	15,620	-	47,570	27,007	2,800	-	29,807	29,807
DDOU	46,498	31,838	14,660	21,390	67,888	23,887	11,775	10,043	45,705	35,662
DDST	42,987	26,318	16,669	-	42,987	17,846	4,387	-	22,233	22,233
DDMP	38,832	37,622	1,210	1,030	39,862	32,227	1,210	1,030	34,467	33,437
DDCO	36,693	28,643	8,050	-	36,693	23,281	3,420	-	26,701	26,701
DDRV	34,464	27,284	7,180	-	34,464	24,973	5,860	-	30,833	30,833
DDSC	32,173	30,671	1,502	8,339	40,512	20,620	-	3,904	24,524	20,620
DDNV	32,101	29,512	2,589	-	32,101	19,377	2,200	-	21,577	21,577
DDRT	31,872	23,007	8,865	27,821	59,693	20,894	8,072	26,125	55,091	28,966
DDOO	28,382	18,595	9,787	-	28,382	16,654	9,786	-	26,440	26,440
DDBC	27,740	9,633	18,107	8,788	36,528	4,601	2,553	2,250	9,404	7,154
DDTP	26,542	16,862	9,680	400	26,942	15,419	6,410	400	22,229	21,829
DDWG	21,655	18,358	3,297	-	21,655	13,926	2,308	-	16,234	16,234
DDHU	20,965	15,625	5,340	-	20,965	13,190	5,289	-	18,479	18,479
DDAG	15,442	15,442	-	-	15,442	8,808	-	-	8,808	8,808
DDJF	7,361	4,936	2,425	360	7,721	3,444	1,442	360	5,246	4,886

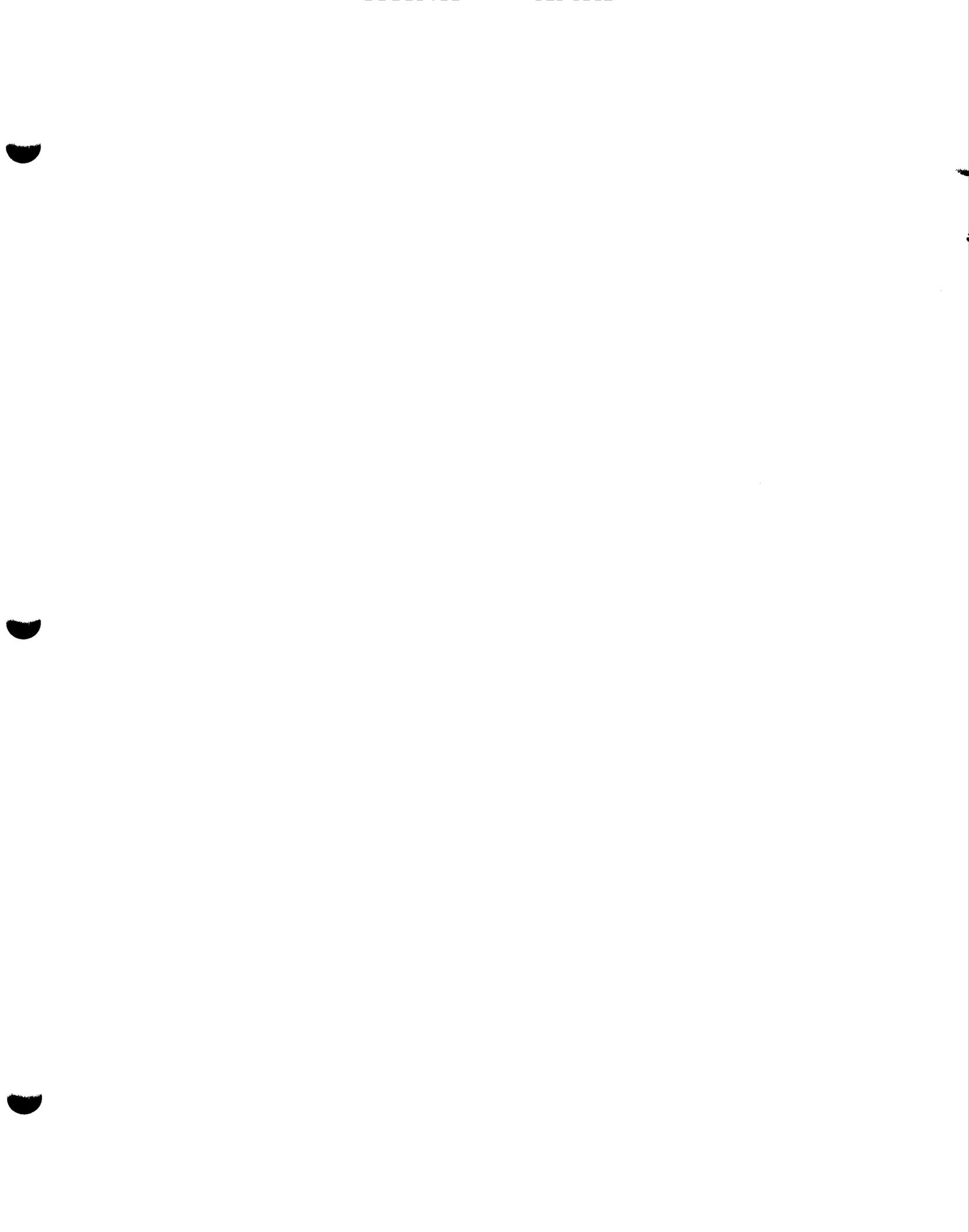
\*Total: Covered & Improved Open Storage

I: Improved Open

U: Unimproved Open

Source: Storage Mgt Report DDF805

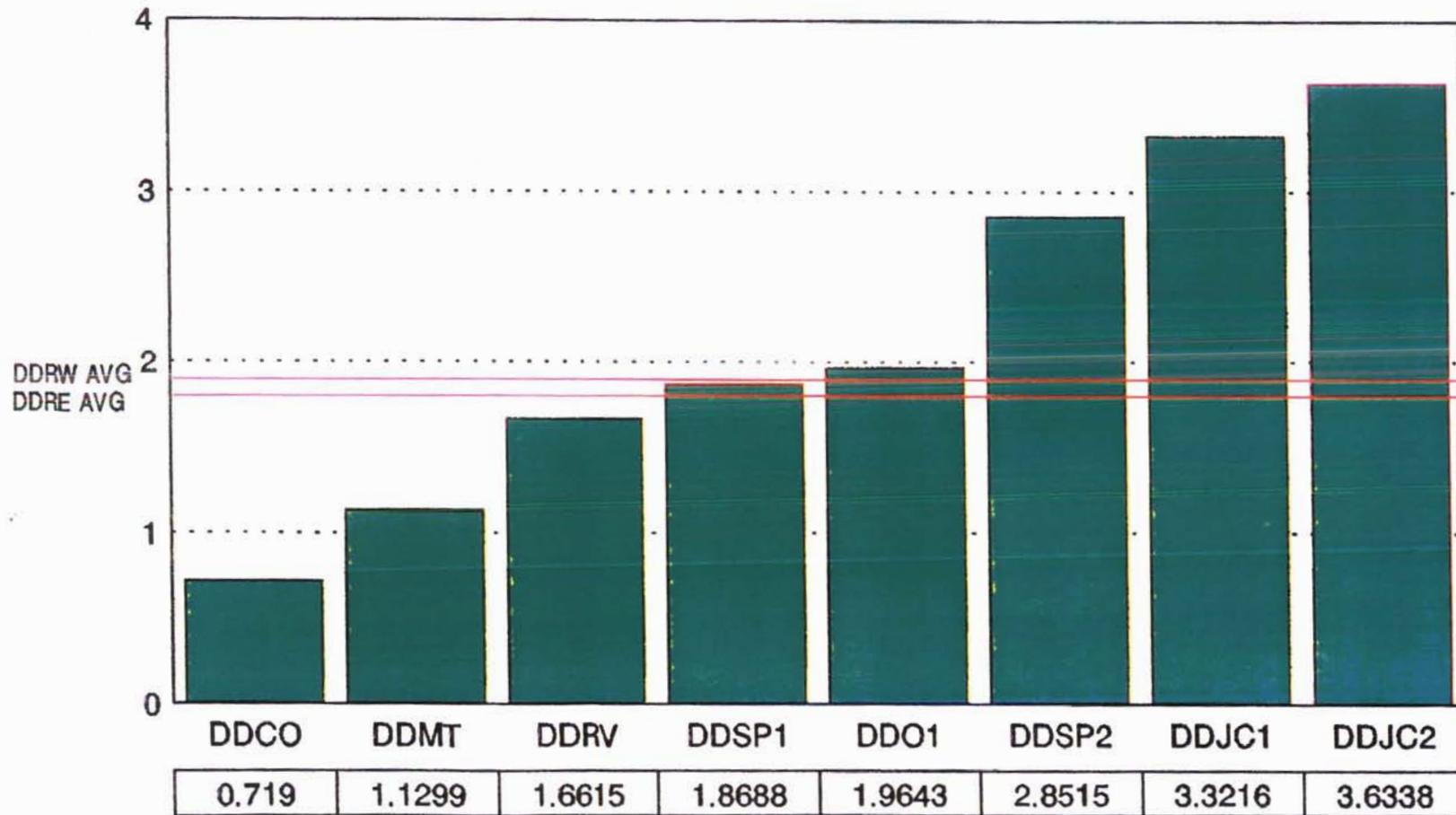
9/30/94



## PERFORMANCE STATISTICS

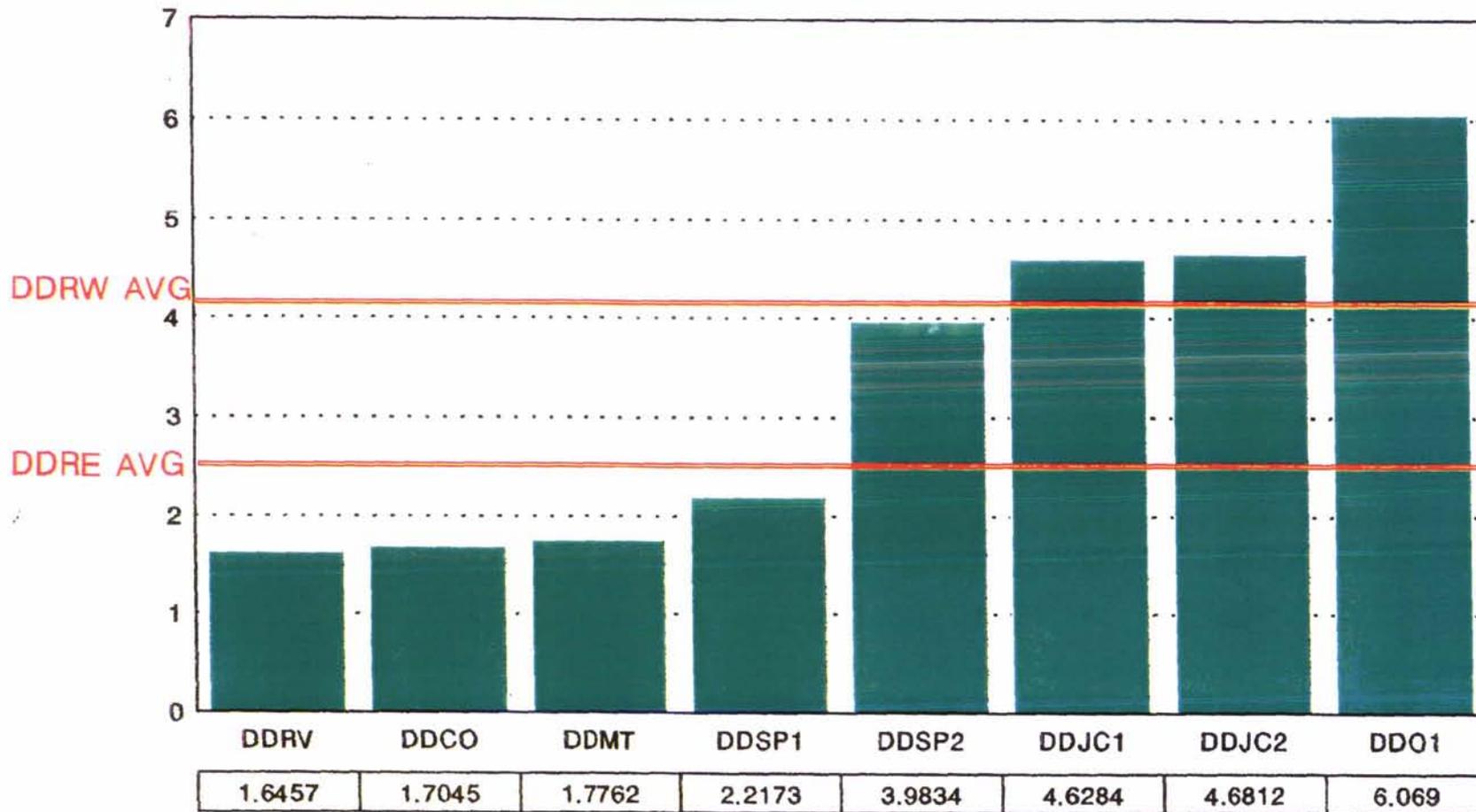
- **DDMT CONSISTENTLY BEATS DLA GOALS**
- **DDMT CONSISTENTLY TOP ECHELON PERFORMING DEPOT**
- **PERFORMANCE ATTRIBUTED TO TOTAL INTEGRATED FACILITY**
- **FLEXIBILITY OF DEPOT SYSTEM ALLOWS FOR CONSISTENTLY HIGH PERFORMANCE TO INCLUDE SURGE IN WORKLOAD AS PROVEN IN DESERT STORM**

# RECEIPT PROCESSING PROCUREMENT



DLA GOAL - 4 DAYS

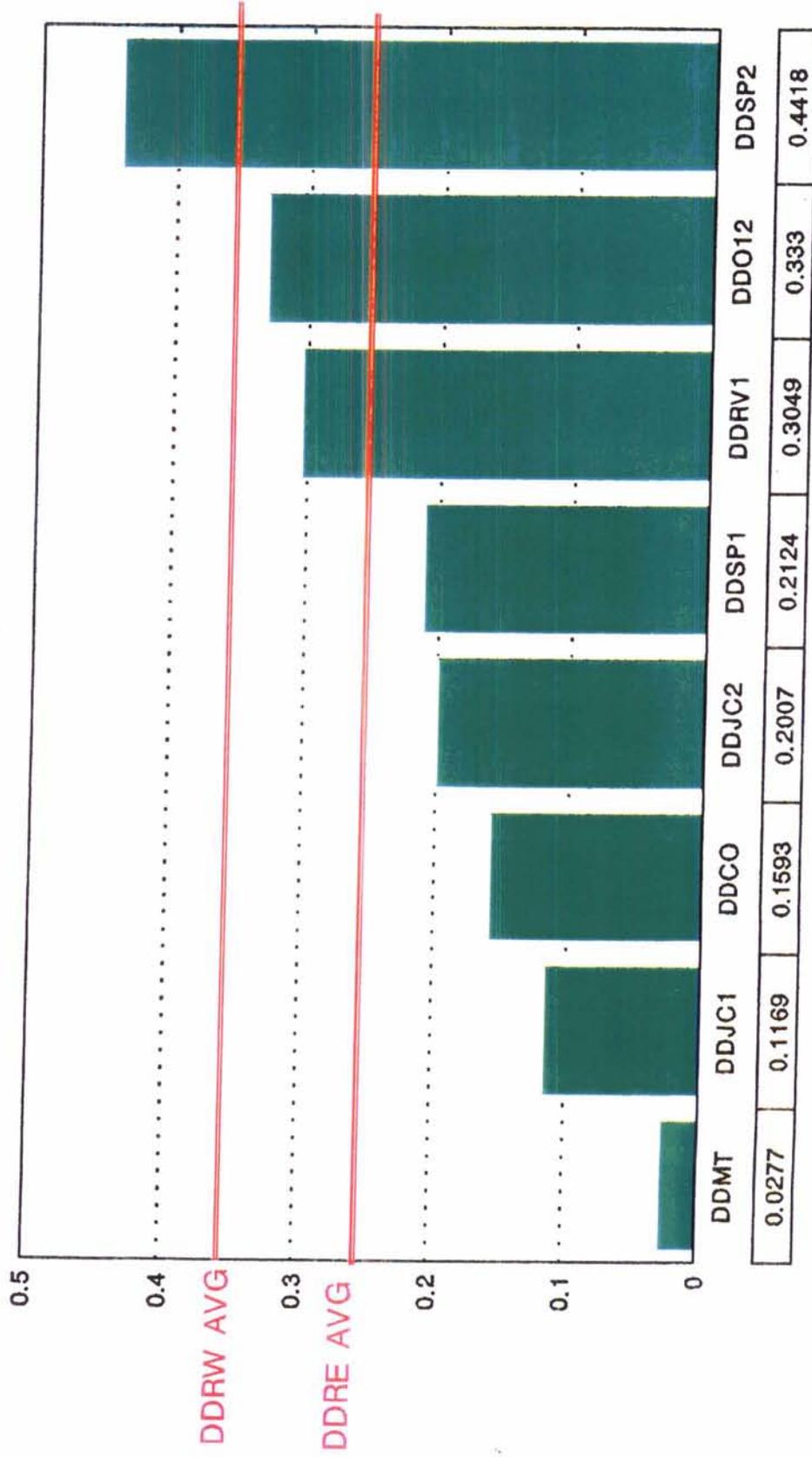
# RECEIPT PROCESSING RETURNS



DLA GOAL 10 DAYS

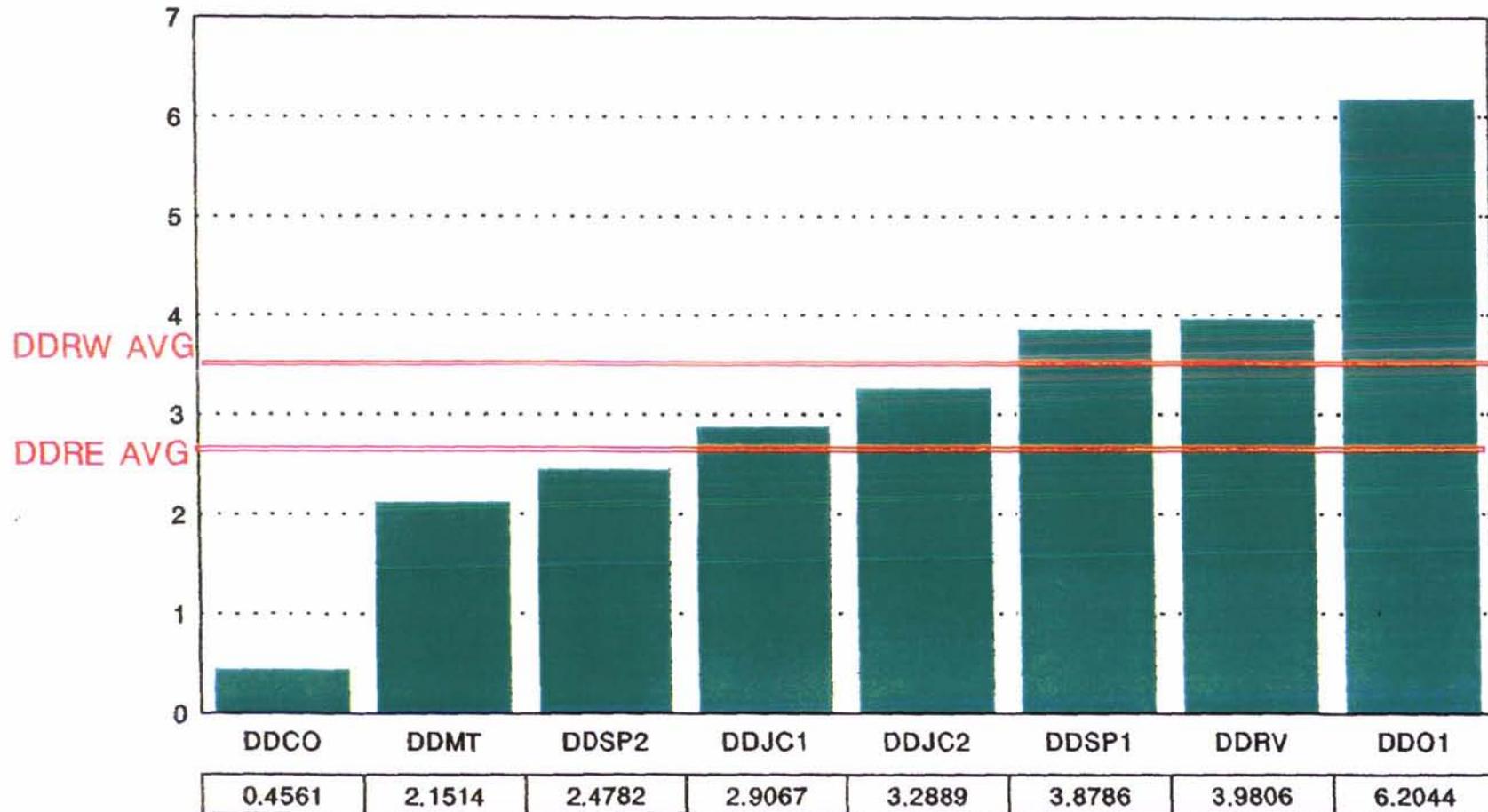
# MRO PROCESSING

HI PRIORITY



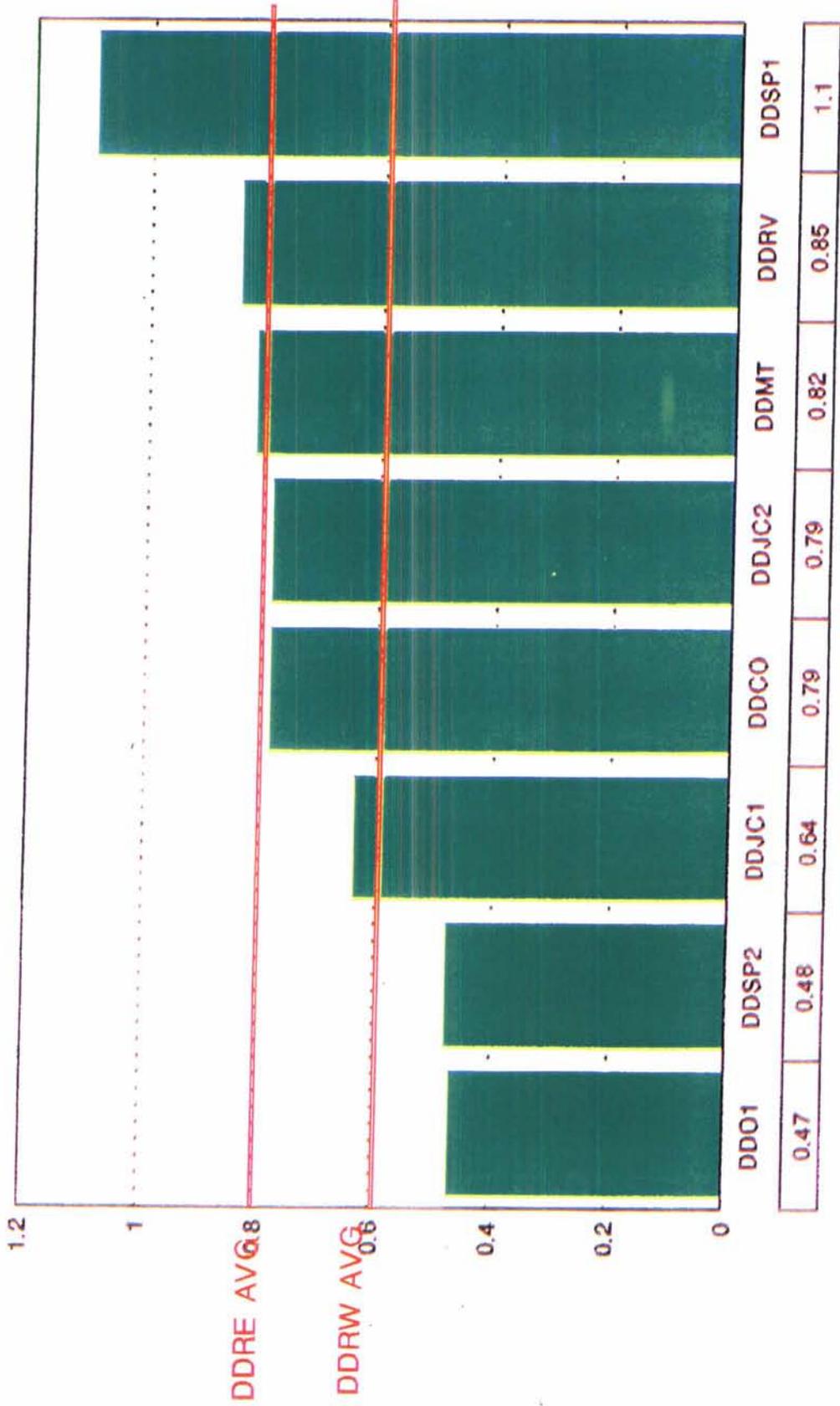
DLA GOAL 1 DAYS

# MRO PROCESSING ROUTINES



DLA GOAL 8 DAYS

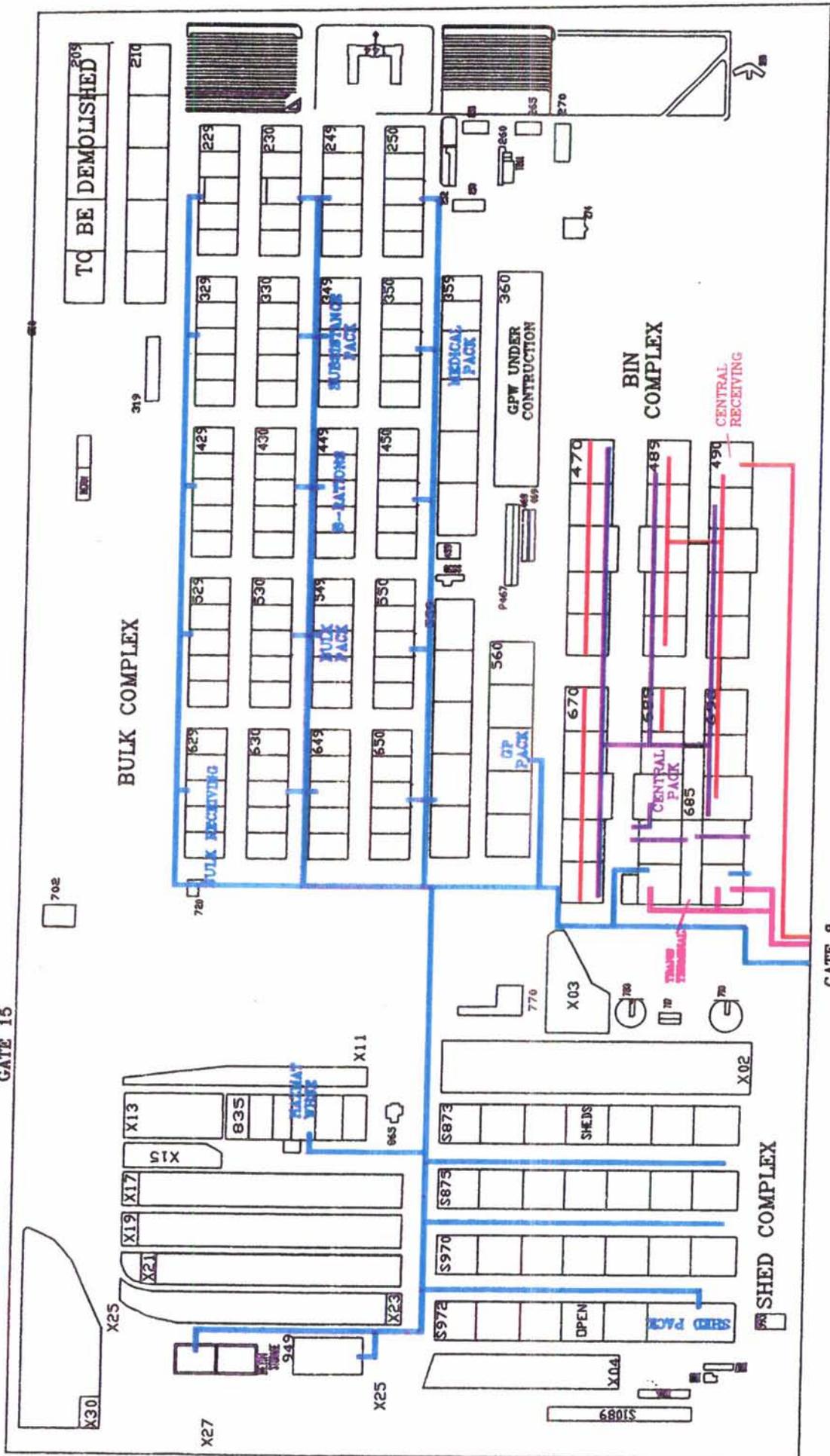
# DENIALS



DLA GOAL .8%

# DDMT MATERIAL WORK FLOW

GATE 15



- BIN RECEIPTS/STOW
- BIN PACK/CENTRAL PACK
- BULK RECEIPTS/STOW/PACK/OUTLOAD
- TRANSPORTATION OUT
- RECEIVING FULL TRUCK LOADS ALL BULK/SHED WHSES
- TRANSPORTATION TERMINAL DEPOT WIDE
- INTRA-DEPOT TRANSPORTER TRUCK SERVICE

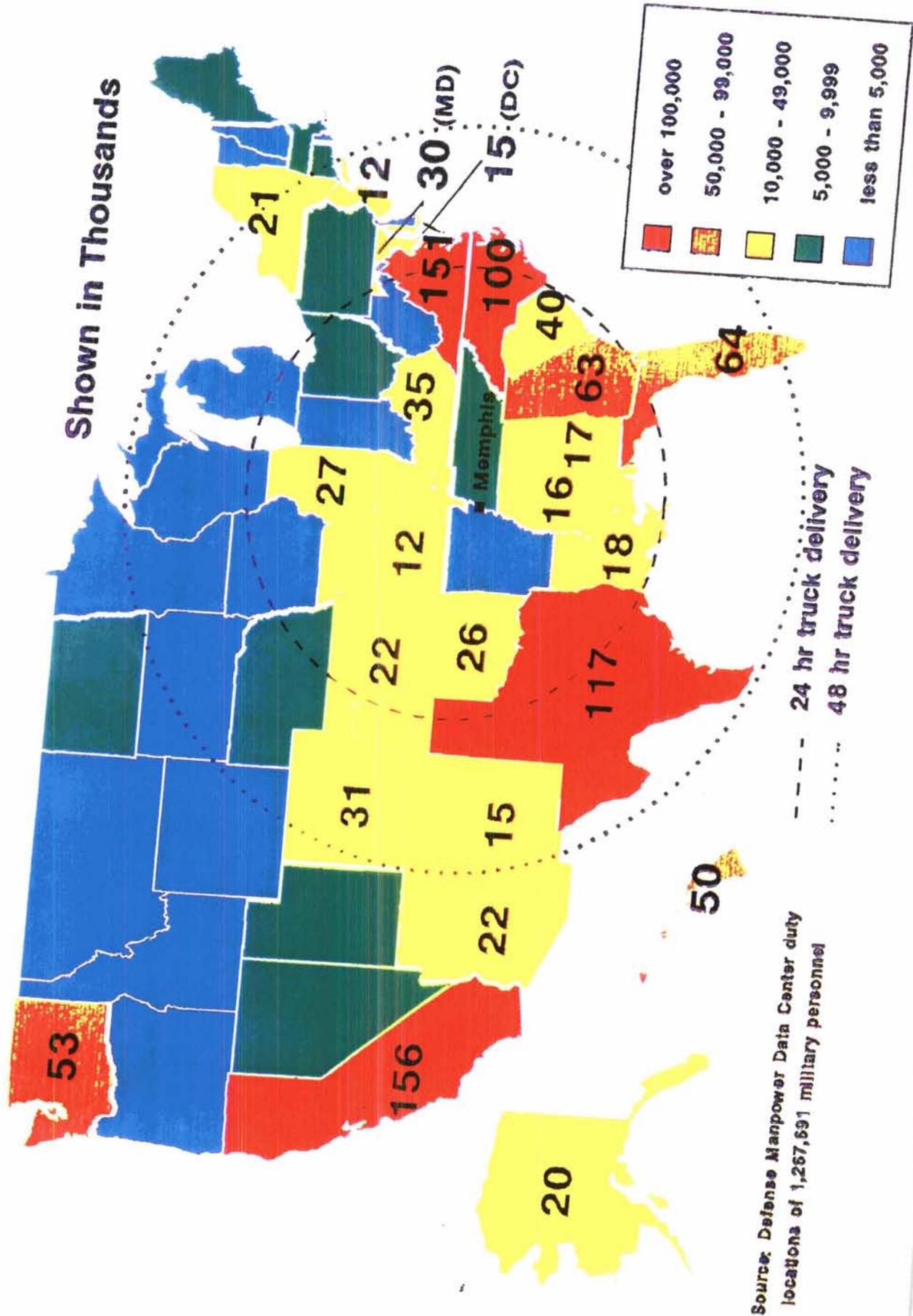
# OPERATION DESERT STORM

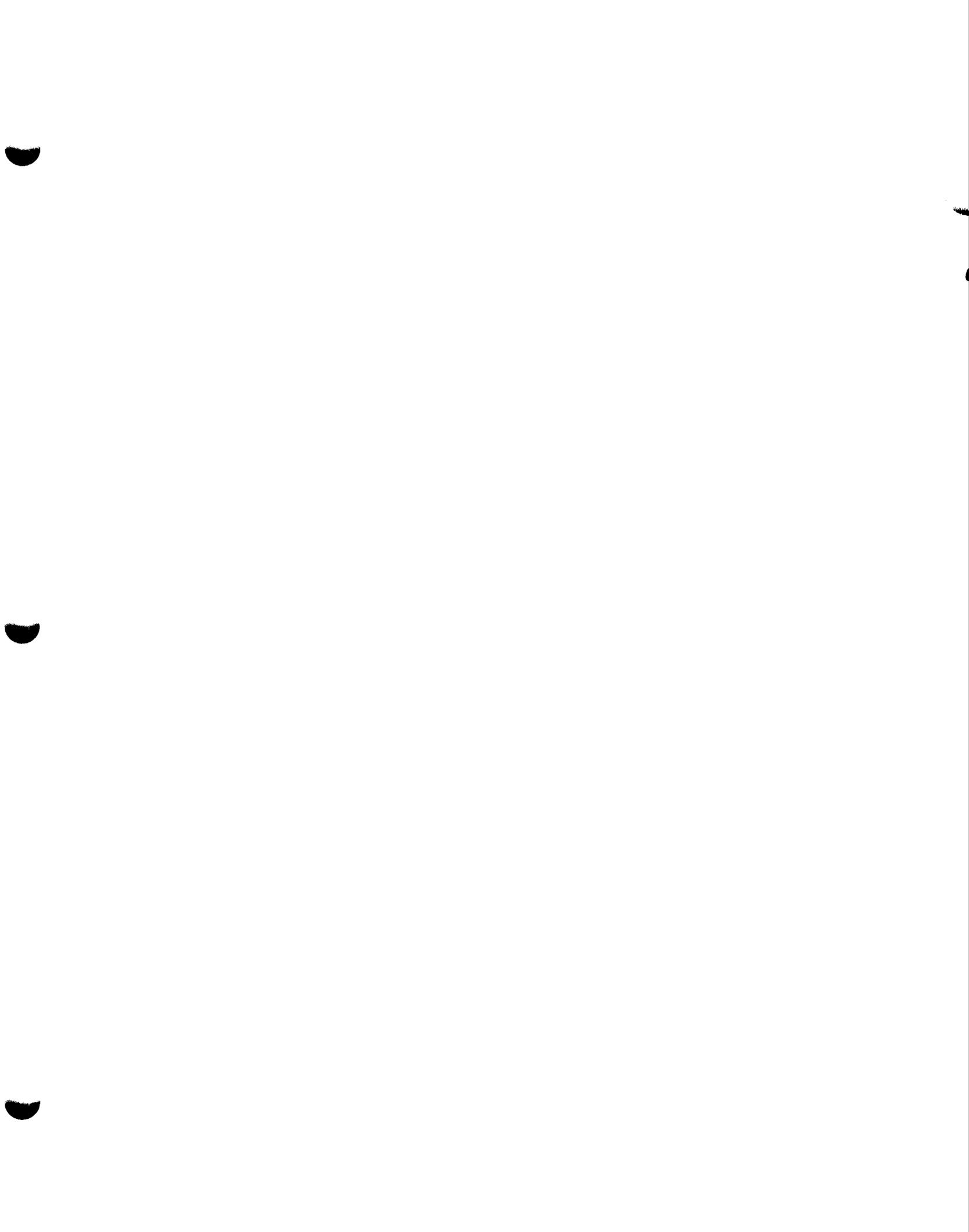
<u>DEPOT</u>	<u>LINES IN/OUT</u>	<u>%</u>
<i>DDMT</i>	<i>892,061</i>	<i>22</i>
DDRV	693,923	17
DDRW	687,064	17
DDMP	677,691	16
DDOU	645,832	16
DDCO	505,139	12
TOTAL	4,101,710	100

# OPERATION DESERT STORM

<u>DEPOT</u>	<u>TONS</u>	<u>%</u>
<i>DDMT</i>	107,324	42
DDRV	47,574	18
DDMP	38,790	15
DDRW	40,257	15
DDOU	22,592	9
DDCO	1,766	1
TOTAL	258,303	100

# TOTAL TROOP STRENGTH BY STATE



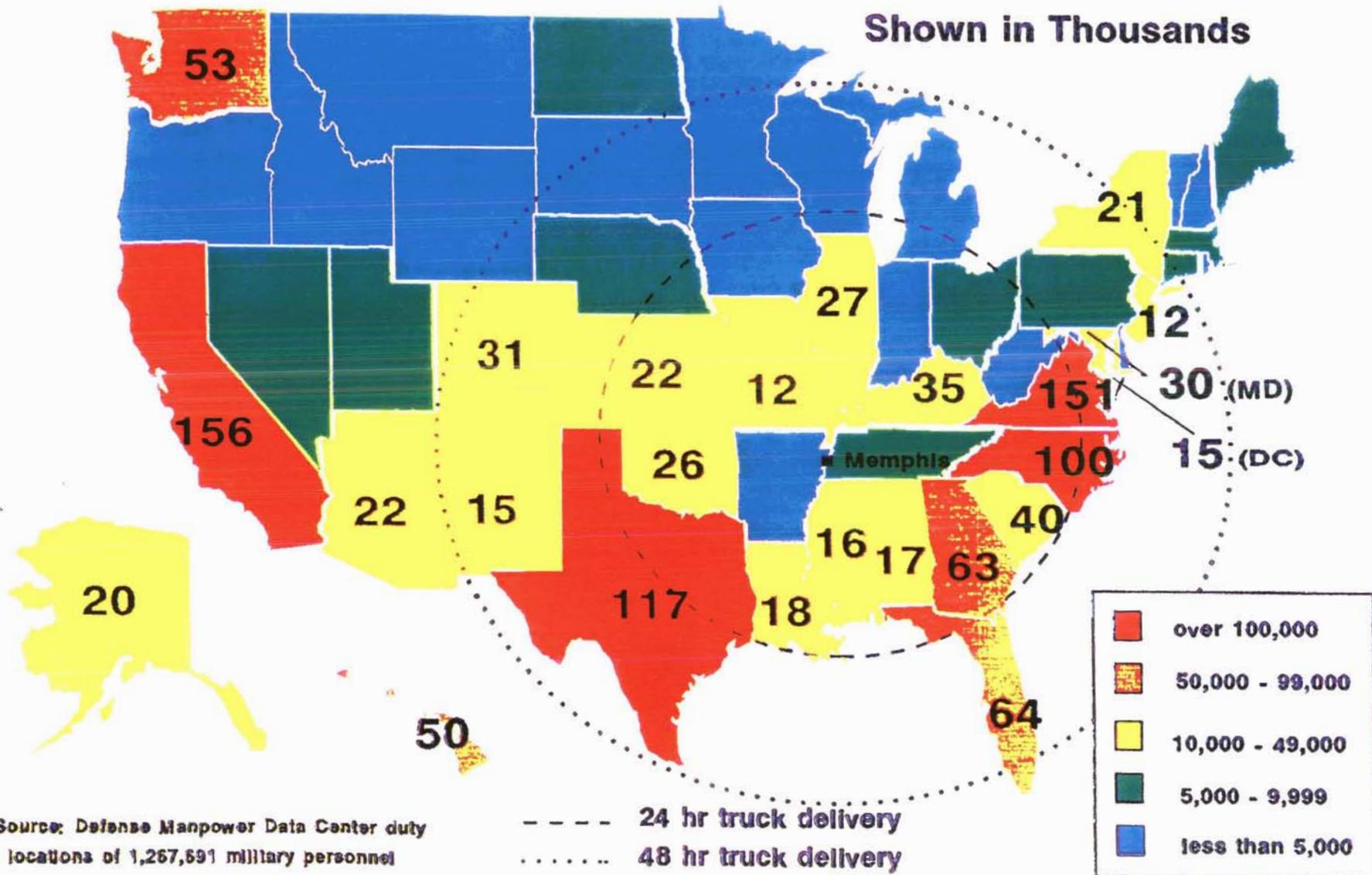


## **STRATEGIC LOCATION**

- **DDMT GEOGRAPHICALLY LOCATED IN CENTRAL U.S.**
- **STRATEGICALLY LOCATED TO MOST U.S. PORTS FOR FLEXIBILITY IN WAR SURGE**
- **FEDEX SUPERHUB PROXIMITY LENGTHENS DDMT WORKSHIFT VERSUS EAST-WEST DEPOTS**
- **TRANSPORTATION HUB ALLOWS GREAT TRUCKLOAD CAPABILITY**

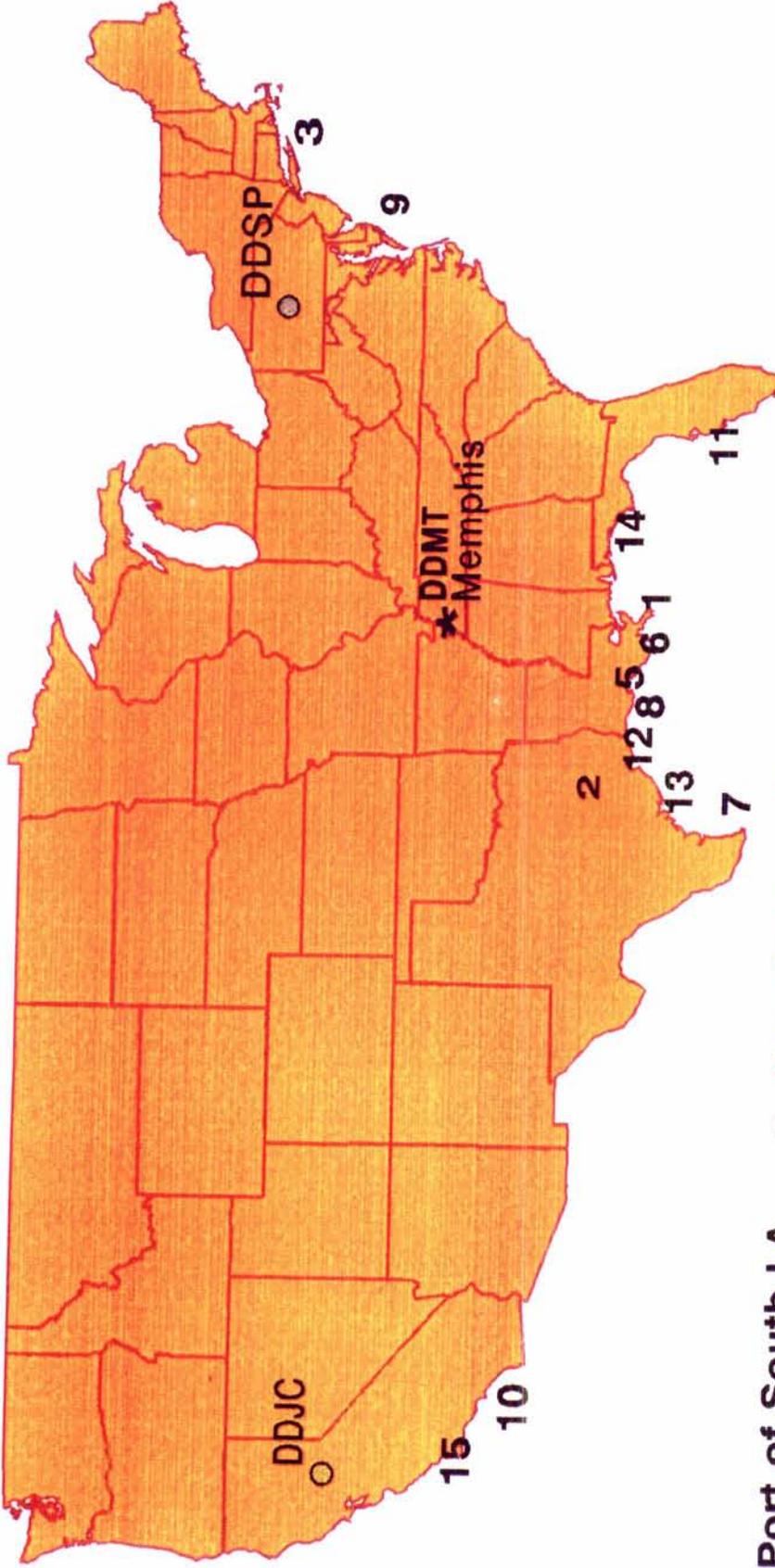
# TOTAL TROOP STRENGTH BY STATE

Shown in Thousands



Source: Defense Manpower Data Center duty locations of 1,267,691 military personnel

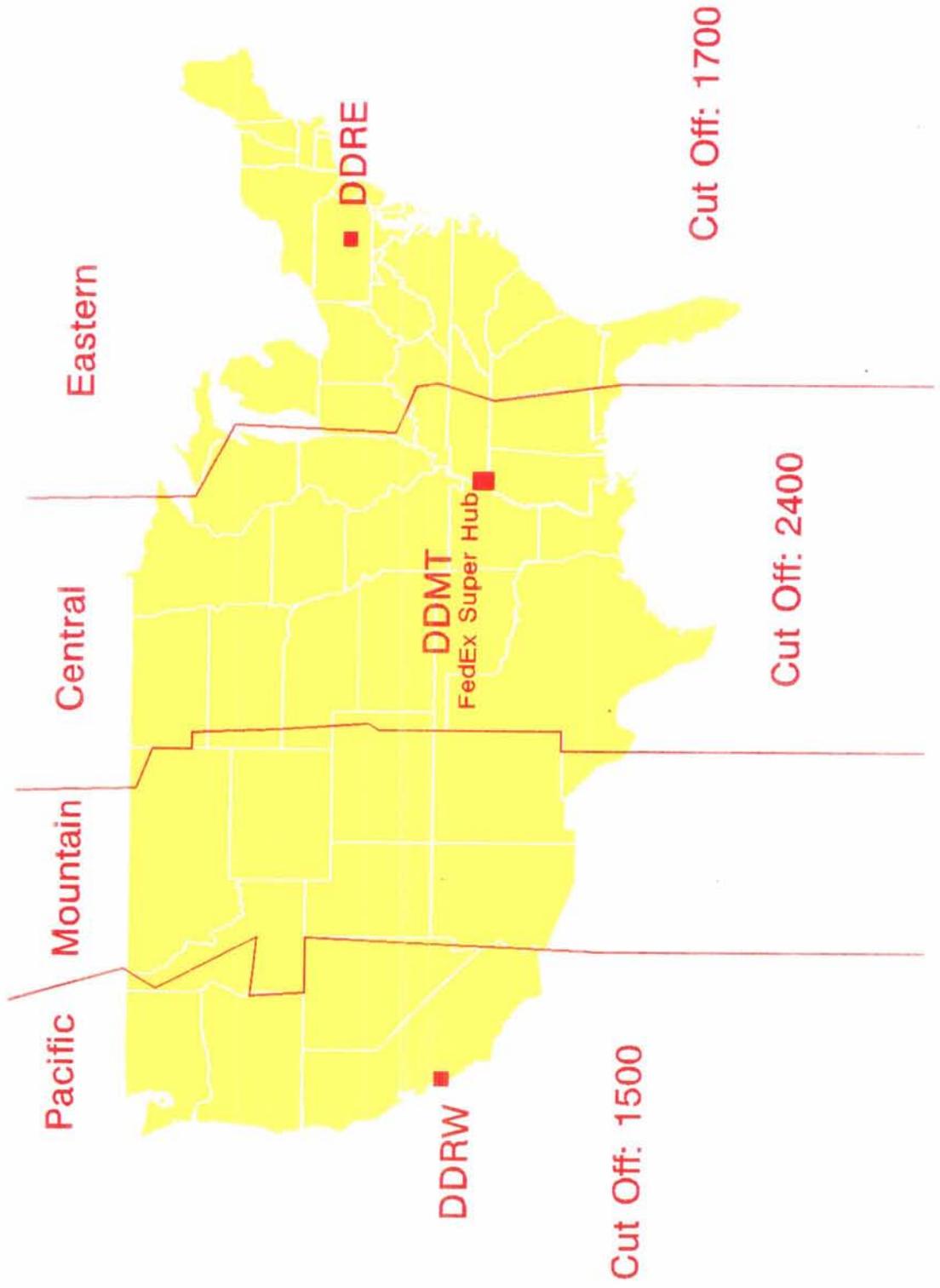
# Top 15 U.S. Ports Ranked By Tonnage



- |                     |                      |
|---------------------|----------------------|
| 1. Port of South LA | 11. Tampa, FL        |
| 2. Houston, TX      | 12. Lake Charles, LA |
| 3. New York, NY     | 13. Texas City, TX   |
| 4. Valdez, AK       | 14. Mobile, AL       |
| 5. Baton Rouge, LA  | 15. Los Angeles, CA  |

Source: Calendar Year 1992 Top 50 U.S. Ports Ranked by Total Tonnages.  
 Prepared by Waterborne Commerce Statistics Center, New Orleans, La.

# DDMT PROCESSING CAPABILITY FedEx

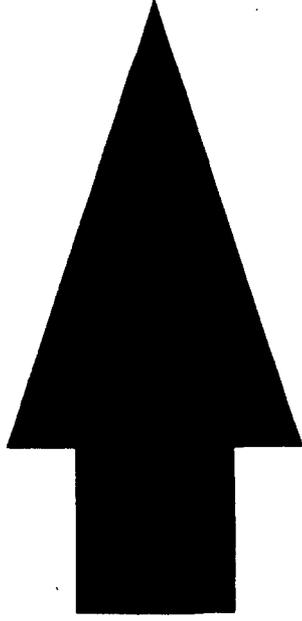


# **The Southeast: Top Notch In The Sun Belt**

**Cannon Computers -** "pulled out of 5 warehouses and consolidated distribution in Memphis."

"looked at Atlanta, St. Louis, and Dallas but chose Memphis...the workforce and the proximity to trucking companies."

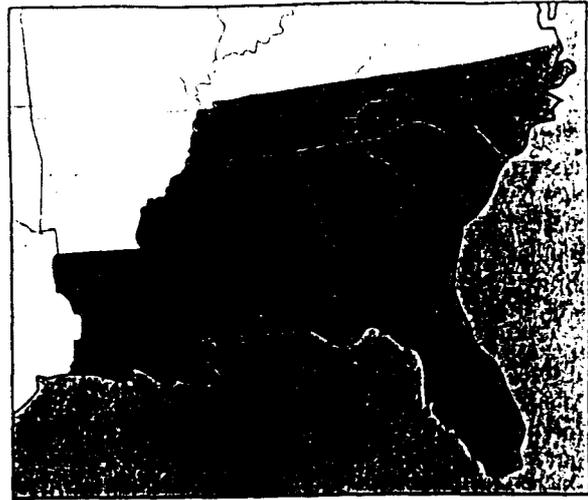
**"FEDERAL EXPRESS'S MEMPHIS** headquarters is a magnet...**MEMPHIS** shippers can work until **MIDNIGHT** and get the product out the **NEXT DAY.**"





# THE SOUTHEAST TOP NOTCH IN THE SUN BELT

**NEWLY RELOCATED SHIPPERS FIND THAT CLOSER ACCESS TO PORTS AND CARRIERS MAKES FOR WARMER CUSTOMER RELATIONS.**



By Tom Anandel, associate editor

**T**here is at least one beneficiary of the layoffs and corporate downsizing that's been plaguing US industries: The Southeast.

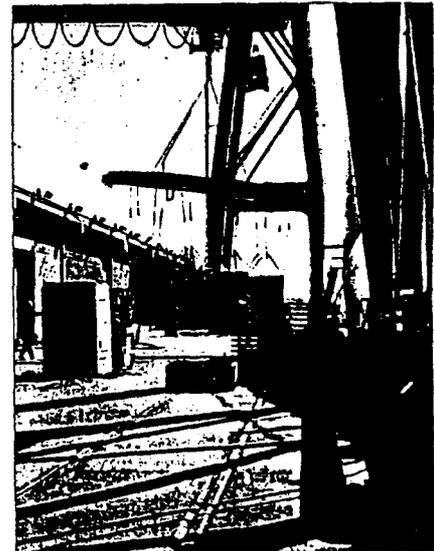
According to Atlas Van Lines, the Southeast is shaping up to be America's "economic promised land," as indicated by recent moving patterns and trends. Household goods shipments generally reflect a trend of population flow out of high unemployment areas to places where jobs and economic conditions are better, according to J. Stephen Mumma, Atlas Van Lines senior vice president, marketing and public relations.

"Corporate relocations make up nearly two-thirds of Atlas moves, so it is clear that companies are relocating employees to regions where the economy is healthier and the job picture is brighter," he says.

Still, distribution patterns in the Southeast are in flux. For a long time the number one distribution site in the Southeast was Atlanta, with Memphis trailing close behind. Then population and income built up and companies found they couldn't distribute their product very favorably from one spot. That's when distribution points began to split up and compete more energetically for business. Florida started touting the fact there were no property taxes on business inventories and no sales and use tax on goods produced in the state for export outside the state. North Carolina Ports sold distribution managers on their strategic access to world markets and sophisticated information processing capabilities. Mem-



*Pallets of Chilean fruit are inspected by the US Dept. of Agriculture at the Wilmington Terminal's dockside refrigerated warehouse for Unifrutti of America, Inc. At this North Carolina State Ports Authority facility, the fruit is loaded on trucks destined for customers throughout the Southeast.*



phis shot back, extolling the benefits of its multi-faceted transportation infrastructure and its one-day proximity to 43% of the US population.

"If you went back ten years and did your distribution analysis, Atlanta was the optimal location in the southeast," says Craig Gustin, principal of CGR Management Consultants in Atlanta. "If you do those studies now, Atlanta still does very well, but I have a feeling that after the Olympics are held here in 1996, there might be somewhat of a fall off. Longer term I think the locus for a single site might shift toward North Carolina. If you look at the state's population it's actually bigger than Georgia, and I think it will be a more attractive area to site DCs serving portions of the Northeast as time goes by."

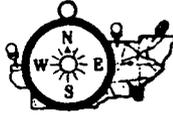
All Southeast cities can boast of lower land and building costs. They're about 80% of those in Newark, NJ, says L. Clinton Hoch, president of Corplan, a site consulting firm in West Orange, NJ. And transportation deregulation has eliminated one of the major concerns about siting in this region: an unfavorable rate structure.

"The rates used to be punitive to many parts of the south," says Hoch. "Now there are formula rates based on miles."

### Ports improve access

In addition to positive economic features, companies are also discovering a geographic feature of this region that had eluded them before—the ability to efficiently serve points in the Midwest

## SITE LOCATION



from southern ports. "If you look at a map of the US you'll see that ports in North Carolina are about the same distance from Chicago as they are from New York," says Hoch. "The Southeast coast of the US slants in westward and that has a tremendous influence on the ability to service more than one region from southern ports."

Andreas Economu, general manager of the Philadelphia-based Unifrutti of America, Inc., chose the Wilmington Port of North Carolina as an alternative port for bringing his fruit in on the east coast to serve the south. Grapes, peaches, plums, nectarines, and other fruit come in from Chile and are distributed through Texas, Florida, Atlanta, Birmingham, New Orleans, Oklahoma City, and North Carolina. Unifrutti has two other distribution points: Los Angeles and Philadelphia.

"This is our third season at this port and so far it has worked for us," says Economu. "The Port of North Carolina built the cold storage facilities for us to service our needs right at the pier."

Economu also likes this region's lower labor costs. He says he's paying less for labor here than at the Philadelphia and Wilmington, DE ports. Still, he says one of the major factors driving his company's decision to relocate in North Carolina is the shifting population.

"The South is growing, and many companies in the North are buying chains in the South," he says. "A lot of the trucking companies we use are located in the South, so we don't have any problem getting transportation."

That's critical to Unifrutti, because its shipments are growing rapidly. Their first year at the Wilmington, NC port, the company shipped out 120,000 boxes of fruit. By the end of the second year shipments reached 250,000. This year Economu projects they'll ship out 450,000 boxes.

John Warden, senior vice president with Walter Companies, Atlanta-based site selection, brokerage, and development consultants, says his firm is doing a lot of work for DCs that need to be closer to their markets.

"The siting of DCs is dictated very much by transportation costs and service issues," he says. "The Port of Charleston offers close access to the open sea and

it's in the midst of a major capital improvement program. They've expanded their container handling capability to where they're now the largest single container terminal on the East coast in terms of total acreage in one location."

### Low labor costs

Of all the selling points the Southeast offers—including lower taxes, utilities, and acquisition costs—the discussion always comes around to labor. It's low-cost, abundant, and predominantly non-union.

"In most cases if a company wants to hire 200 or 300 people for manufacturing or distribution type jobs, they'll find them," says Brett Chambless, vice president of Walter Companies. "A lot of people are tired of dealing with union contracts every two or four years, and most of the states in the south are right-to-work states. If you run your plant properly you have a good shot at running it without a union."

Assembling a workforce that was knowledgeable about—and committed to—their products was an important element in Canon Computer's decision to consolidate distribution in Memphis. Canon, headquartered in Costa Mesa, CA, pulled out of five public warehouses across the country and consolidated in Memphis in 1993. It brought operations in-house to get better control over distribution.

"We wanted to centralize operations and from Memphis we could serve two-thirds of our customer base within three days or less," says Scott Hovinga, na-

### For more information...

...on site location in the Southeast, circle the appropriate numbers on the Reader Service Card in this issue.

- Cullman Community & Economic Development Agency (Alabama) **Circle 151**
- Florida Dept. of Commerce **Circle 152**
- Georgia Center for Site Selection **Circle 153**
- Louisiana Dept. of Economic Development **Circle 154**
- Memphis Area Chamber of Commerce **Circle 155**
- Metro Economic Development Alliance (Mississippi) **Circle 156**
- North Carolina State Ports Authority **Circle 157**
- South Carolina Dept. of Commerce **Circle 158**

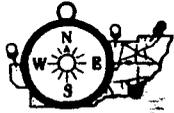
tional distribution operations manager.

"We looked at Atlanta, St. Louis, and Dallas as other possibilities, but chose Memphis because of the tax structure, the workforce, and the proximity to trucking companies. The Chamber of Commerce provided us with several contacts in the business community for site selections within the city. They also provided legal advice on the tax benefits of moving into Memphis. The city offered a pilot program that allowed us a tax freeze for five years on leased and purchased goods."



Canon Computers pulled out of five public warehouses across the country and consolidated distribution in Memphis in 1993. Being near Federal Express's Memphis headquarters allows Canon DC employees to work until midnight if they have to get product out the next day.

## SITE LOCATION



Having their own work force was icing on the cake.

"We've been able to work closer with the people that care more about our product and our customer service," says Hovinga. "We can work overtime when we need to without having to see if it's OK to work overtime. We've improved shipping response time and we're looking at a shipping window of within 24 hours. We haven't hit that goal yet but we're getting closer to it."

Federal Express's Memphis headquarters is a magnet to this region, he adds, noting that Memphis shippers can work until midnight and get product out the next day.

### Trends

United Parcel Service (UPS), headquartered in Atlanta, sometimes helps customers find suitable locations. Mike Hewson, manager of UPS Properties, says his company has a program which

uses customer shipping criteria such as cost, service, or a combination of both, to help them relocate. In doing so, Hewson has observed several major trends.

"The geographic shift of the whole US is to the sun belt," he says. "Florida will benefit tremendously with anything that happens in South America because of NAFTA. The Ports of Charleston and Savannah are becoming much more used for inbound and outbound. One medical supply company in New York City does so much business in Florida that they're looking at relocating in Jacksonville because that would give them a large area of Florida plus Georgia. The Southeast has great magnet programs to get headquarters to relocate there."

All this rapid growth has a potential downside, says Hewson. Cities like Atlanta are likely to face infrastructure problems.

"There are so many new neighborhoods popping up all over that the in-

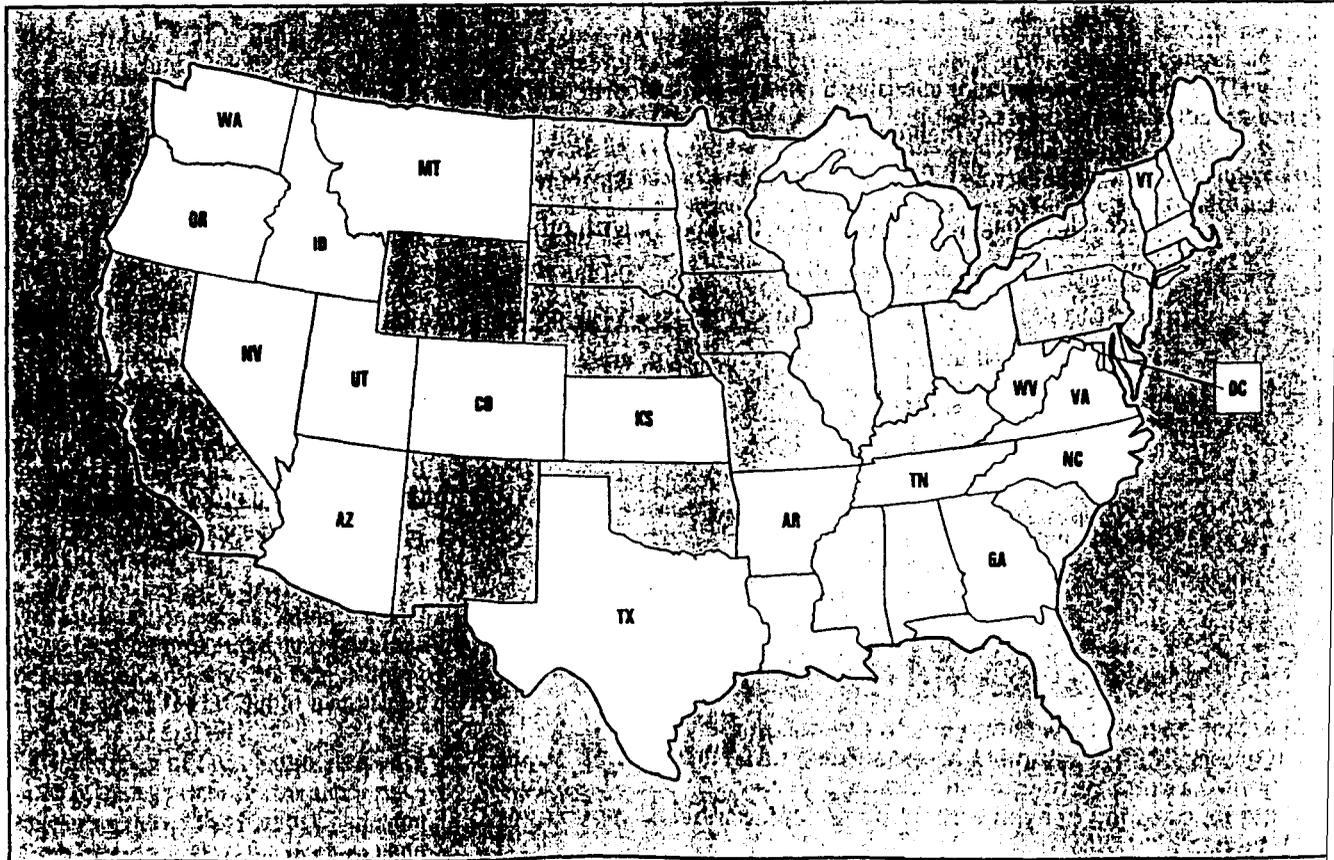
*"The Southeast has great magnet programs to get headquarters to relocate there."*

frastructure of the roads isn't keeping up," he adds. "They need to build more major roads to keep up with all the people moving here. There are some horrendous traffic jams—almost as bad as New York and Chicago."

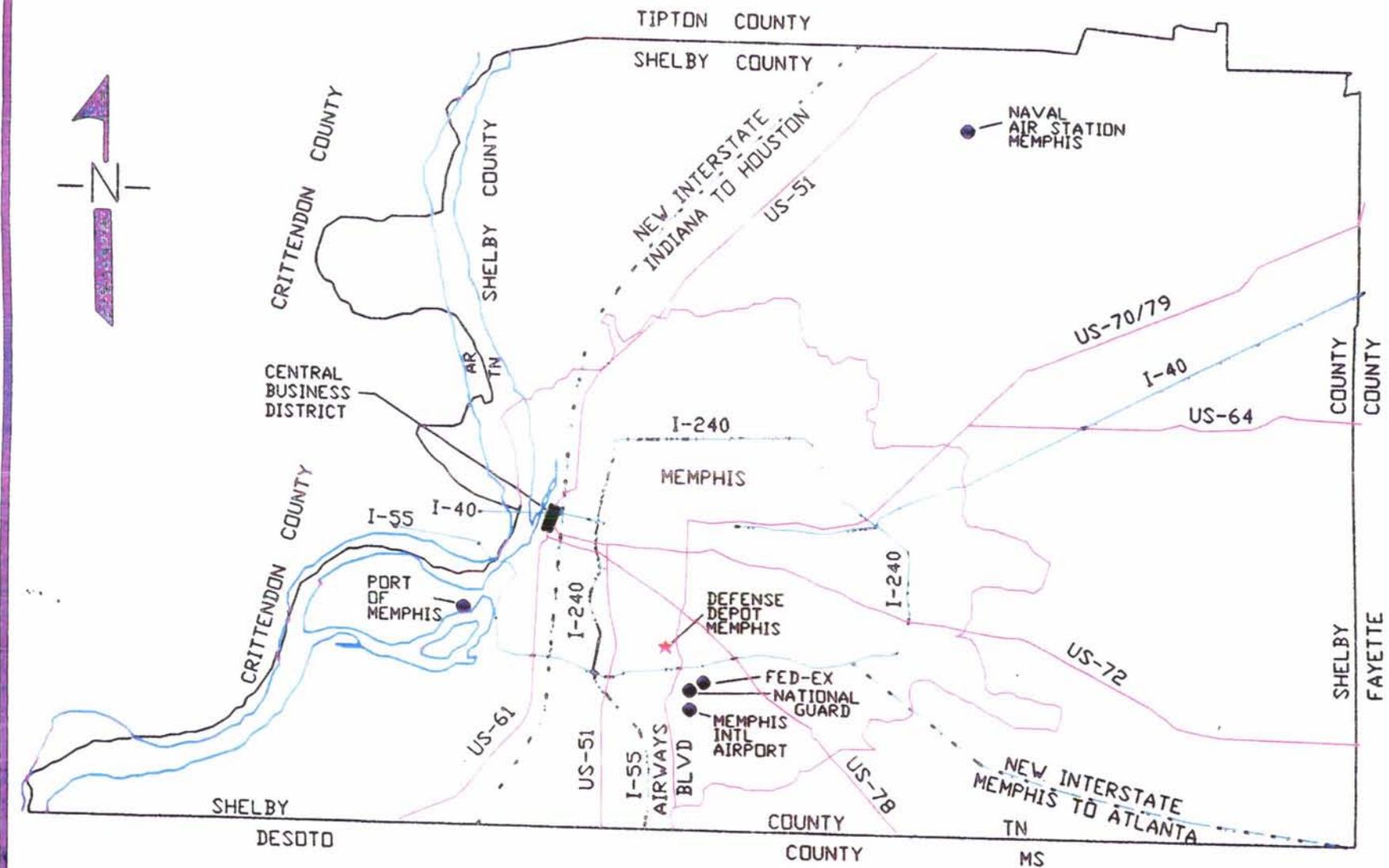
Still, cities in the Southeast want your company. Hewson notes that while cities in other regions are offering major incentives to keep industries from moving out, the Southeast is beckoning "come on down!"

*In June we'll show you what the Northwest is doing to compete with the Sun Belt's siren song.* T&D

*Atlas Van Lines identified 20 "magnet states"—those having a minimum of 55% of their total Atlas interstate relocations moving into the state. Three Southeast states made the top ten: Georgia, North Carolina, and Arkansas. Tennessee is also considered a magnet state. Household goods shipments generally reflect a trend of population flow out of high unemployment areas to places where jobs and economic conditions are better, say Atlas sources.*



# DDMT TRANSPORTATION NETWORK



- 200 TRUCKLINES
- 44 AIR CARRIERS
- 9 AIR LINES

- 6 ALTERNATE AIRPORTS
- 2 MILITARY AIR TERMINALS: C-5, C-141, C-130
- 6 MAJOR RAIL SYSTEMS, 96 TRAINS IN/OUT PER DAY
- 6 COMMERCIAL BARGE LINES, 25,000 MILES INLAND WATERWAYS



# MOBILIZATION

- **#1 IN WAR (LINES AND TONS)**
- **FEDERAL EXPRESS**
- **#1 IN ACTUAL BULK WORKLOAD - WILL THE NEXT WAR BE A "*BINNABLE WAR*"???**
- **DDMT - MOBILIZATION DEPOT - THE REST OF THE WORLD**
- **DESERT STORM - LESSONS LEARNED**

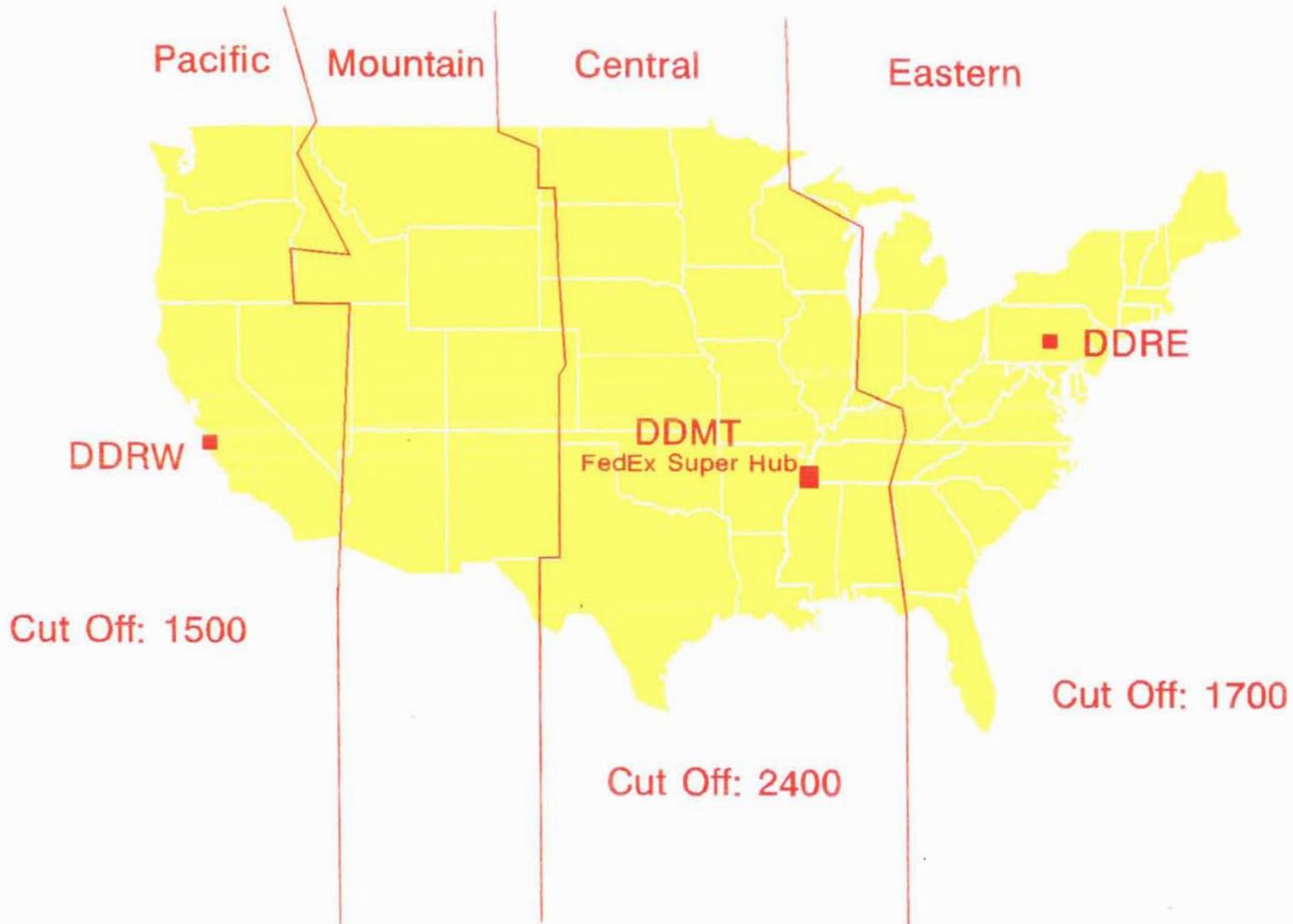
# OPERATION DESERT STORM

<u>DEPOT</u>	<u>LINES IN/OUT</u>	<u>%</u>
<i>DDMT</i>	<b>892,061</b>	<b>22</b>
DDRV	693,923	17
DDRW	687,064	17
DDMP	677,691	16
DDOU	645,832	16
DDCO	505,139	12
TOTAL	<b>4,101,710</b>	<b>100</b>

# OPERATION DESERT STORM

<u>DEPOT</u>	<u>TONS</u>	<u>%</u>
<i>DDMT</i>	107,324	42
<i>DDRV</i>	47,574	18
<i>DDMP</i>	38,790	15
<i>DDRW</i>	40,257	15
<i>DDOU</i>	22,592	9
<i>DDCO</i>	1,766	1
<b>TOTAL</b>	<b>258,303</b>	<b>100</b>

# DDMT PROCESSING CAPABILITY FedEx



**FY 94 ACTUAL WORKLOAD  
VS.  
MAXIMUM SURGE CAPABILITY (1 - 8 hr shift)**

	<u>DDMT</u>	<u>DDCO</u>	<u>DDRV</u>	<u>DDOU</u>	<u>DDSP</u>	<u>DDJC</u>
FY 94 Actual Workload						
Bin %	<b>38.0%</b>	60.8%	72.0%	68.0%	76.0%	66.0%
Bulk %	<b>59.0%</b>	39.0%	21.0%	29.0%	23.9%	33.0%
Haz %	<b>3.0%</b>	0.2%	7.0%	3.0%	0.1%	1.0%
Max Surge Capability						
Bin Lines	<b>8,797</b>	8,275	12,321	18,569	47,420	44,844
Bulk Lines	<b>13,659</b>	5,308	3,594	7,919	14,912	22,423
Haz	<b>695</b>	27	1,198	819	63	679

- 1) DDMT actual surge - 18,000 Lines In/Out
- 2) DDSP/DDJC design not actual
- 3) "Binnable" War

**Source:**

BRAC 95 Infrastructure Cost, Pg S-3-1  
BRAC 95 Detailed Analysis, Pg 8-2

# DDMT MOBILIZATION DEPOT - THE REST OF THE WORLD



Source: DoD Force Structure Plan

# THE REST OF THE WORLD

- LATIN AMERICA
  - UNSTABLE
  - SUPPORT DEMOCRATIZATION PROCESS
  - DRUG ASSOCIATED VIOLENCE & CRIME
- AFRICA
  - CHRONIC INSTABILITY
  - INSURGENCY
  - CIVIL WAR
  - NONCOMBATANT EVACUATIONS
  - CONFLICT RESOLUTION
- REGIONAL CONFLICTS
  - SOUTHEAST EUROPE
  - ASIA
  - MIDDLE EAST
  - AFRICA
  - LATIN AMERICA

**LESSONS LEARNED**  
**DESERT STORM**

***ONE MAJOR REGIONAL CONFLICT***

**DDSP - "GRIDLOCK"**

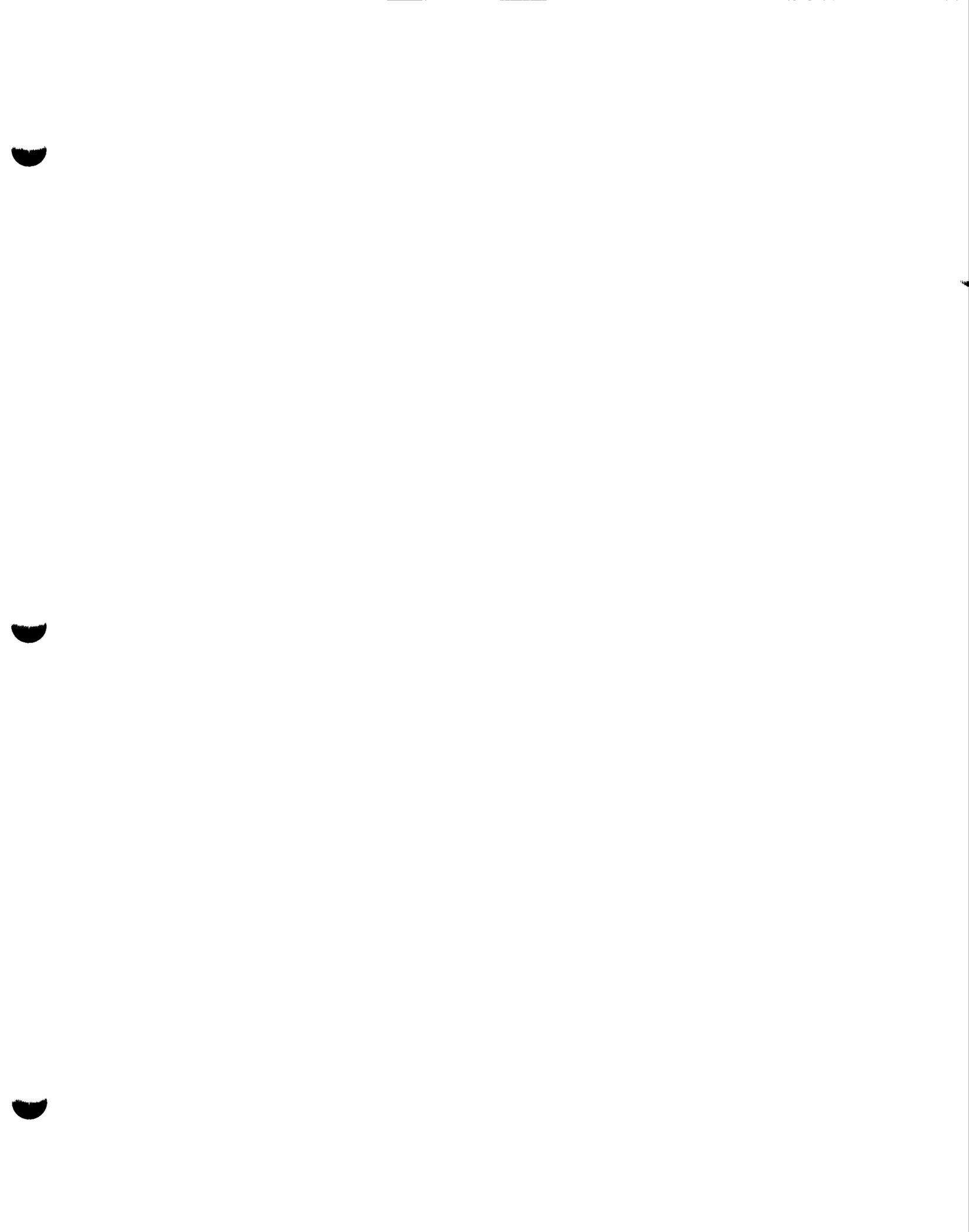
**REF: SUPPORT OF OPERATIONS DESERT SHIELD/STORM, MAY 92**

**REF: DLA BRIEF AT DDSP**

**DDOU - "85% SHIPMENTS WENT SOUTH TO LOUISIANA PORTS"  
"WEST PORTS CHOKED"**

**DDMT - "42% OF DESERT STORM WORKLOAD"**

***WHO WILL SUPPORT NEXT TIME?***



**Transportation**

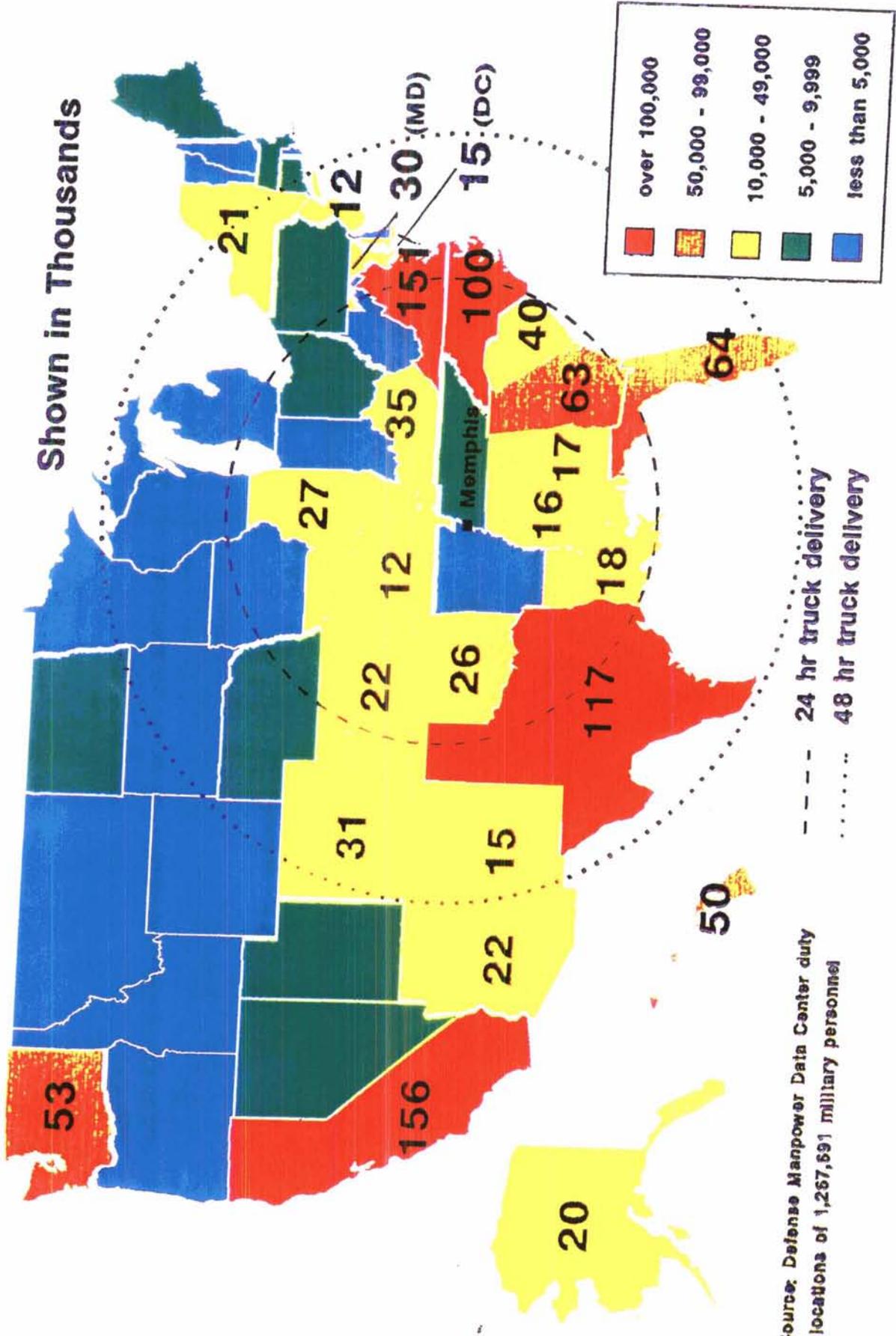
**Transportation**

**Transportation**

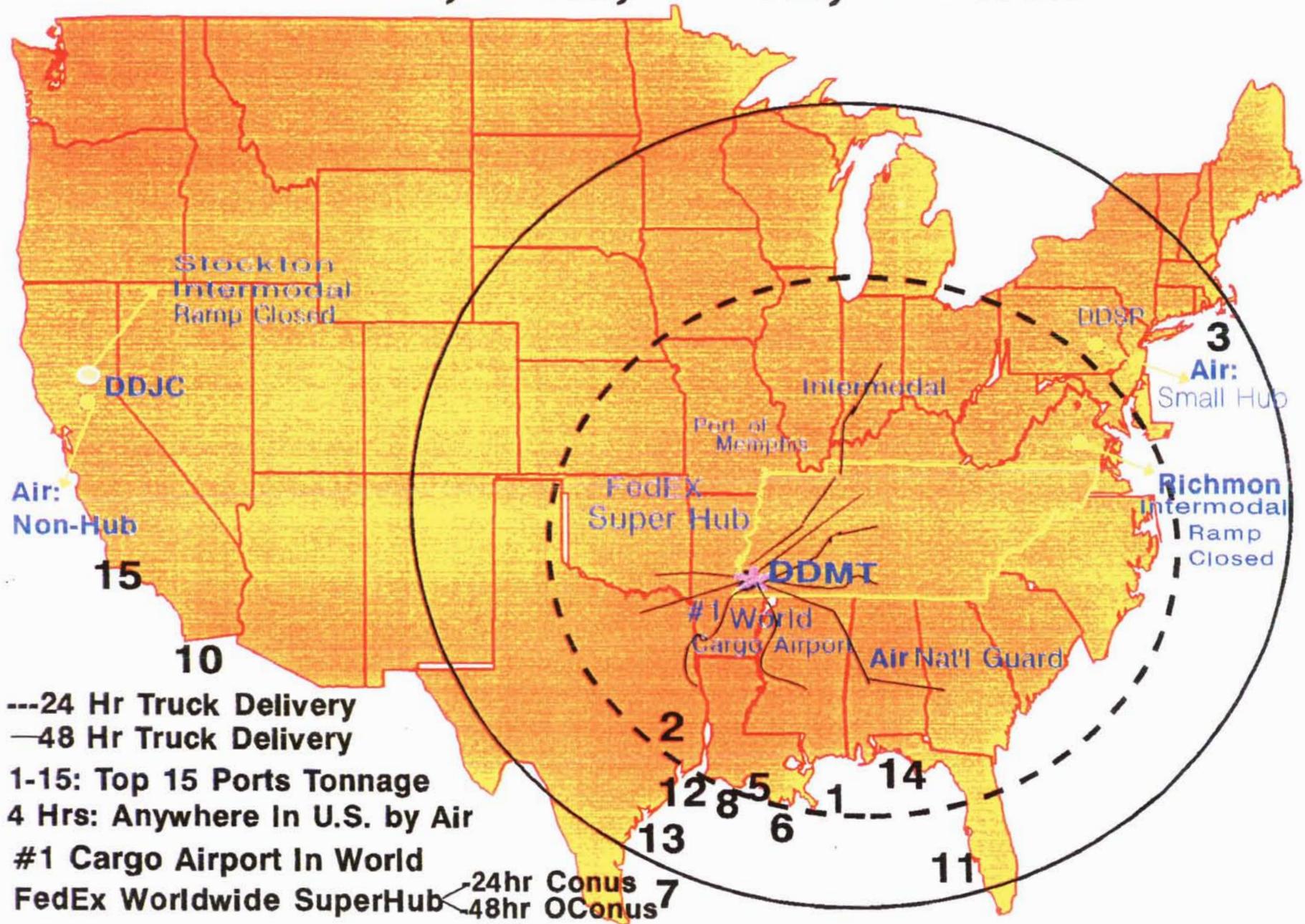
**LAND; AIR; RAIL; WATER**

DoD Logistics Strategic Plan: "Transportation rather than storage, becomes the prime contributor to the DoD's ability to deliver material on time."

# TOTAL TROOP STRENGTH BY STATE



# LAND, AIR, RAIL, WATER



CONGRESSMAN HAROLD E. FORD OF TENNESSEE QUESTION TO DLA

9. Please advise which airport used by DLA depots have C130, C141, and C5 capability.

-- DLA's RESPONSE --

In BRAC 95, we did not gather data related to the capability of local airports to handle various military airlift aircraft. The capabilities of local civilian airports to handle large military airlift aircraft is not considered a significant advantage. The majority of DoD requirements are shipped by surface transportation. Urgent shipments that do require airlift, are usually sent out from military airfields. Even the majority of shipments that are required for contingency operations such as Desert Storm are shipped by surface transportation to military points of embarkation. Therefore, depots in close proximity to military aerial and water ports of embarkation have an advantage.

--DDMT's RESPONSE --

THE DEPARTMENT OF DEFENSE LOGISTICS STRATEGIC PLAN, EDITION 1994, contradicts the DLA response:

Assumptions about the Future Logistics Environment

II. Ships and aircraft (both military and commercial) available to the DoD that are able to carry military equipment to both improved and unimproved locations will continue to be a constraint to deploying forces. Expanded intermodal transportation, including containerization, will somewhat compensate for this constraint. For airlift, there will be an increased reliance on commercial assets to augment military strategic airlift capability in the future. As transportation, rather than storage, becomes the prime contributor to the DoD's ability to deliver material on time, the importance of managing information about intransit assets and the status of movements becomes paramount.



**DDMT BRAC 95**  
**DEPOT RECOMMENDATIONS**

**REDESIGNATION**

**DEFENSE DISTRIBUTION DEPOT MEMPHIS, TN (DDMT). REDESIGNATE DDMT AS PRIMARY DISTRIBUTION SITE (PDS). RESTORE ADMINISTRATIVE SUPPORT CENTER (ASC) CAPABILITY.**

**CLOSURE**

**CO-LOCATED DEPOTS - CLOSE TWO CO-LOCATED DEPOTS AT TWO AIR LOGISTICS CENTERS.**

**RELOCATION**

**CO-LOCATED DEPOTS - RELOCATE ALL COMMON USE STOCK TO STAND ALONE DEPOTS.**

## PRIMARY DISTRIBUTION SITES

<u>CRITERIA</u>	<u>DDMT</u>	<u>DDSP</u>		<u>DDJC</u>	
		<u>DDMP</u>	<u>DDNP</u>	<u>DDSC</u>	<u>DDTC</u>
ACF STORAGE CAPACITY	51,330	38,832	47,570	32,173	50,332
AVG DAILY THRUPUT CAP	10,805		25,064		17,376
BIN%	38%		76%		66%
BULK%	62%		24%		34%
CONSOLIDATION POINTS	ATS		CCP		CCP
HIGHWAYS					
MAIN INTERSTATE	4		3	1	1
SPUR INTERSTATE	1		1	2	2
FOUR LANE	4		4	0	0
TWO LANE	2		4	0	0
PORT OF EMBARKATION					
AERIAL (Miles)	3	140	136		UNKNOWN
WATER (Miles)	10	174	178		UNKNOWN
AIRLIFT CAPABILITY					
PASSENGER (HUB/MILES)	MEDIUM/3	SMALL/16		SMALL/12	NONHUB/3    NONHUB/19
CARGO*	#1 WORLD WIDE				
PALLET	ALOC		ALOC		ALOC
DESERT STORM					
LINES	892,061	677,671		N/A	687,064
TONS	107,324	38,790		N/A	40,257

\*FEDERAL EXPRESS  
 AIR NATIONAL GUARD  
 MEMPHIS INTERNATIONAL AIRPORT

SOURCE:  
 DLA Detailed Analysis  
 BRAC EG Minutes  
 BRAC Data Call  
 Support of Operation Desert  
 Shield/Storm, May 92

## AIR FORCE STORAGE SPACE OFFERED TO DLA

<u>ALC</u>	<u>AVG THRU</u>	<u>MAX SURGE</u>	<u>ACF</u>	<u>% OFF-BASE</u>
OKLAHOMA CITY			0	39%
HILL	4,149	26,360	620,000	53%
SAN ANTONIO	5,215	12,363	6,430,000	65%
McCLENNAN	4,380	6,940	11,480,000	37%
WARNER ROBINS	4,667	7,659	340,000	52%

- DLA BUILDINGS AT ALCs ARE AT VARIOUS LOCATIONS BASEWIDE, WHICH EXCHANGES INTEGRATED FACILITIES FOR DIVERGENT OPERATIONS.

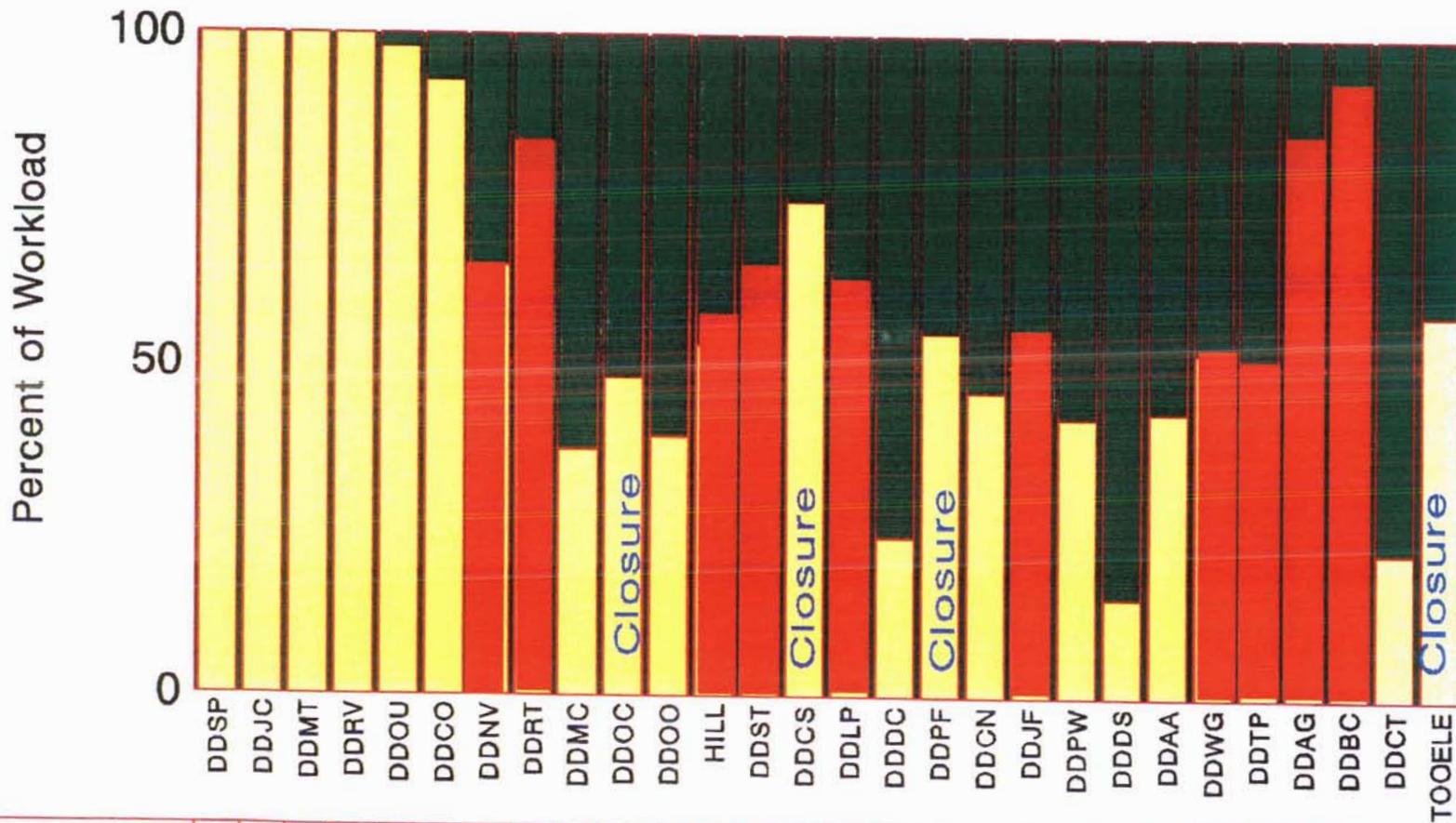
- IF WAREHOUSING SPACE, TRANSFER OF FACILITIES SHOULD HAVE OCCURRED DURING DMRD 902 CONSOLIDATION.

- IF NOT WAREHOUSING SPACE, WHERE IS THE ADDITIONAL COST FOR STORAGE AID SYSTEMS , MATERIAL HANDLING VEHICLES, MATERIAL HANDLING SYSTEMS, INTRADEPOT TRUCKS, ADDITIONAL PERSONNEL (OPERATIONS, MAINTENANCE) AND INFRASTRUCTURE COST (UTILITIES, BMAR, ETC.). NO COST IDENTIFIED IN COBRA OR SAILS.

- IF SPACE NOT UTILIZED BY AIR FORCE, ALCs SHOULD BE CLOSED AS EXCESS CAPACITY.

# Defense Distribution Depots

## Off-Base/On-Base Workload



% ON-BASE	0	0	0	0	2	7	35	16	63	52	61	47	35	25	37	76	45	54	45	58	85	57	48	49	15	7	78	42				
% OFF-BASE	100	100	100	100	98	93	65	84	37	48	39	53	65	75	63	24	55	46	55	42	15	43	52	51	85	93	22	58				
% OFF-BASE																																
% ON-BASE																																
50% COLLOCATED OFF-BASE																																

# DDAG

## REDISTRIBUTION OF DDMT ASSETS

INFRASTRUCTURE: 16 BUILDINGS

% OFF-BASE WORKLOAD: 85%

THROUGHPUT: 23RD OUT OF 23 DEPOTS

AVG 1,036 (DLA BRAC 95 DETAILED ANALYSIS  
SURGE 1,519 THROUGHPUT CAPACITY)

STORAGE CAPACITY: 17TH OUT OF 23 DEPOTS

15,442 ACF

PRIMARY STANDARD SYSTEM: MOWASP

(DWASP NOT IMPLEMENTED - MARINES  
DENIED MAINFRAME ACCESS TO  
DDRC)

MATERIAL HANDLING SYSTEMS:

RECEIVING

MANUAL

STORAGE AND RETRIEVAL

MANUAL

PACKING

MANUAL/FORKLIFTS

SHIPPING

4 CONVEYOR LINES (3 GRAVITY)

MANUAL/FORKLIFTS

AIR:

NON-HUB

NO. OF LANDINGS

C-5

NOT CAPABLE

C-141

2 ONLY

C-130

DESERT STORM SUPPORT

SURFACE:

MAIN INTERSTATES

NONE

SPUR INTERSTATES

NONE

4 LANE HIGHWAY

2

2 LANE HIGHWAY

1

MILITARY VALUE POINTS:

MOBILIZATION EXPANSION

1ST SHIFT

0 OUT OF 10

2ND SHIFT

1 OUT OF 10

EXPANDABILITY

BUILDABLE ACRES: 0 OUT OF 25



**COBRA**  
**DDMT'S ANALYSIS**

- **SAVINGS OVERSTATED**
- **MILCON IDENTIFIED**
- **MILCON, OEM, RPM > \$15K NOT IDENTIFIED**

# **COBRA**

## **SAVINGS OVERSTATED**

- **SAVINGS OVERSTATED BY 20% OR \$23.2M**
  - **PERSONNEL SAVINGS OVERSTATED BY \$8.3M**
  - **MOVEMENT OF MISSION STOCK UNDERSTATED BY \$14.9M**
- **RPM > \$15K AND OPERATING EQUIPMENT AND MECHANIZATION REQUIREMENT (PDA) NOT INCLUDED**
- **XDEPOT SHOULD BE REPLACED WITH DDRV, DDAG AND DDSP INCLUDING ALL ASSOCIATED COSTS, E.G. MILCON, OEM, RPM > \$15K, ETC. RERUN COBRA**
- **MILCON ASSOCIATED WITH TENANTS RELOCATION NOT INCLUDED**

**COBRA ANALYSIS  
MILCON  
(THOUSANDS OF DOLLARS)**

<u>DESCRIPTION</u>	<u>MILCON CATEG</u>	<u>USING REHAB</u>	<u>REHAB COST</u>	<u>NEW MILCON</u>	<u>NEW COST</u>	<u>TOTAL COST</u>
<u>DDCO</u>						
DDCO - RACK OUT DDCO	OTHER	0	N/A	0	N/A	1,000
<u>DDL P</u>						
DDAA - 36 ACRE HARDSTAND	OTHER	0	N/A	0	N/A	15,590
<u>DDMT</u>						
XDDMT - DDMT TENANTS	ADMIN	5,460	454	0	0	454
<u>DDOU</u>						
DDRW - ADMIN SPACE	ADMIN	33,186	3,516	0	0	3,516
DDJC - REHAB HAZARD WRHS	HAZAR	83,657	7,345	0	0	7,345
XDDHU - ADMIN SPACE	ADMIN	122,590	11,084	0	0	11,084
<u>DDRT</u>						
DDAA - 44 ACRES HARDSTAND	OTHER	0	N/A	0	N/A	19,040

SOURCE: COBRA

SUPPLEMENTAL CHARTS: PDA/MILCON ALC RACK

# **MILITARY CONSTRUCTION**

**Since new military construction is not feasible in this area of force structure drawdown, we must capatilize on the condition, configuration, and size of additional facilities.**

**Source: Military Value-Stand-Alone Depots**

**MILCON/OEM/RPM > \$15K  
NOT IDENTIFIED IN COBRA**

- RELOCATION OF TENANTS (PITSTOP MEETING AT DDMT,  
16 MAY 95)
- DDRE MILCON/MECHANIZATION PLAN (FY89-02) -

**\$401.57**

# MILBUN/PDA

FY	<u>DDSP</u>	<u>DDRV</u>	<u>DDNV</u>	<u>DDCO</u>	<u>DDMT</u>	<u>DDTP</u>
89	E: ROADWAY CONNECTS \$8.3 (M)					
90	E: HAZMAT PROC (ARMY) \$9.1 (M)					
91				EQUIP GPW \$2.4 (P) GPW \$8.5 (M)	GPW II \$8.5(M)	
92						
93	E: EDC ENHANCEMENTS \$.6 (P) E: Pallet Rack Sys. 80 Series \$3.3 (P) E: TIRE STROAGE AIDS \$1.3 (P)		COLD STORAGE \$12.4 (M)			HAZMAT (ARMY) \$1.9 (M)
94	E: TIRE STORAGE AIDS \$1.3 (P) E: EQUIP HAZMAT \$.8 (P)	OIL STORAGE \$9.5 (M) HAZMAT CONVERT \$6.5 (M) HAZMAT PROC FAC \$3.8(M)				
95	W: WIRE & CABLE \$.8 (P)					
96	E: DISP OFC \$3.7 (M) E: FAM HSG \$3.7 (M) E: IND STRG \$2.0 (P)	PALLET RACK \$.3.4 (P) ODS CYLINDER \$.9 (P)	RPL GPW W104/106 \$10.4(M) REC UPGRADE \$2.1 (M)	RPL TRANSPORTA DOCKS \$.3(P)	RPL CONV MED \$.73 (P)	RECEIVING \$.3 (P)
97	E: FAM HSG \$3.8 (M) E: EDC ACT ITM EXP \$1.2 (P) E: BULK REC MECH \$1.2 (P) E: WALK/PICK \$.43 (P)	HAZMAT CONVERT W12 RENO PROCESSING RECEIVE/PACK \$.4 (P)	BULK AS/RS PH1 V147 \$4.2 (P) EQUIP GPW W104/106 \$1.97 (P) UPGRADE HOTLINE PAD \$1.3 (P)	RECEIVING UPGRADE \$1.98 (P)	PKG/PALLET RACK \$1.45(P) TRASH TAKE-AWAY \$.3 (P) REPL TOWVEYOR \$1.6 (P) GP II/PALLET RACK \$2.1 (P)	
98	E: RPL TRANS DOCK \$.9 (P) E: FAM HSG \$4.0 (M) E: RPL GPW 3&4 \$20.0 (M) E: LTL FRT CONS \$2.8(P) E: NARROW ISLE PALLET BO3\$2.0(P)	HAZMAT B5 \$7.3 (M)	UPGRADE MINILOAD W143 \$3.0 (P) BLK AS/RS PH2 V147 \$3.5(P) RPL GPW Y100A \$9.3 (M)	CANTILEVER PIPE RACK \$.6 (P) MECH MTRL MOVEMENT W30 \$1.3 (P)	CNTRL REC MOD \$1.54 (P) CAROUSELS \$2.5 (P)	PALLET STG RACK B5 \$.9(P)
99	E: EQUIP GPW B 3/4 \$ 6.8 (P) W: NARROW ISLE PALL BO4\$ 2.0(P)	EQUIP HAZMAT B5 \$.8 (P)	EQUIP GPW Y-100A \$4.2 (P) RPL TOTE CNVYR PH 1 B143 \$2.03(P) BLK AS/RS PH3 V147 \$4.2(P)		RPL GPW S559 \$10.1 (M)	
00	W: PALLET STORAGE B508 \$2.2(P) E: STEEL STORAGE B402 \$8.0(P) W: RPL GPW-103 \$8.3 (M)		RPL PAL TRANS SYS W-135,W143 \$.5 TRANSPORTER DOCK \$.6 RPL TOTE CNVYR PH2 B143 \$2(P) BLK AS/RS PH4 V147 \$3.5(P)	GPW 13 \$7.0 (M) GPW 1 \$18.9 (M) C&T	RPL SHED S873 \$4.7 (M) RPL SHED S875 \$5.1 (M) EQUIP GPW 559 \$2.5 (P)	

# MILCON/PDA

01	E. ADD EDC \$13.1 (M) PALLET W. EQUIP GPW \$3.7M (P)		RPL TOTE CNVYR W143 \$2.03 PH3	EQUIP GPW1 PALL RK SYS \$3.24 (P) GPW 3 BLK STG \$10.3 (M)	RPL SHED S870 \$5.4 (M)	
02	E EQUIP EDC \$ 7.9 (P)			EQUIP GPW3 PALLET \$2.6 (P)		
M	\$74	\$26.90	\$34.20	\$42.70	\$31.80	\$1.9
P	\$46.83	\$5.50	\$33.03	\$12.40	\$12.72	\$1.2
T	\$120.83	\$32.40	\$67.23	\$55.10	\$44.52	\$3.1
C	\$74.60	\$13.90	\$53.60	\$45.90	\$16.94	\$0
	M-MILCON PROJECTS					
	P-MECH/MOD PROJECTS					
	C-COST AVOIDANCE					

**MILCON/PDA**

<b>FY</b>	<b><u>DDL</u>P</b>	<b><u>DDAG</u></b>	<b><u>DDCN</u></b>	<b><u>DDWG</u></b>	<b><u>DDJF</u></b>	<b><u>DDAA</u></b>
89						
90						
91						
92						
93	HAZMAT WHSE \$5.4 (M)	UPGRADE HAZMAT \$4.2 (M)				
94						
95						
96	LARGE GUN TUB STG \$ 4 (P)	BULK CLOTHING HNDL \$.2 (P)	STORAGE UPGRADE \$1.9 (P)	CONVEYOR MOD B841 \$ 4 (P)		VEHICLE STG SHELTER \$2.6 (M) MECH WEAPONS REC \$.07 (P)
97				CNTRL SHIP CNVYR B376 \$4.4(P) AGE \$2.0 (P)	PKG CNVYR B110 \$.2(P)	
98				PALLET RACK SYS B366 \$2.0 (P) RPM + (?) SBSS STORAGE B364 \$1.6(P)	GPW \$8.2 (M)	
99	RECV MECH \$3.02 (P) EMISSION CONTROL \$5.4 (M)	CONSTRUCT SHELTER \$1.3 (M)		PALLET RACK SYS B365 \$2.0 (P) RPM + (?)	EQUIP GPW \$2.8 (P)	UPGRADE POWER FREE \$2.7(P) COMBAT VEH STG \$24.0 (M) HAZMAT \$1.6 (M)
00				PALLET RACK B367 \$2.0 (P)		

**MILCON/MPDA**

01								
02								
M	\$10.80	\$5.50				\$8.20		\$28.20
P	\$3.02	\$0.20	\$1.90	\$14.40	\$3.00			\$2.77
T	\$14.22	\$5.70	\$1.90	\$14.40	\$11.20			\$30.97
C	\$0	\$1.30	\$0	\$0	\$0			\$1.6
	M-MILCON PROJECTS							
	P-MECH/MOD PROJECTS							
	C-COST AVOIDANCE							

**DDSP-E NEW CUMBERLAND**  
**MILCON/MATERIAL HANDLING SYSTEMS**

INITIAL COST: \$207M

ADDITIONAL PROJECTS PROGRAMMED

BIN INDUCT	NOT AVAILABLE
PALLET LINE	NOT AVAILABLE
ROADWAY	8.3M
DISPATCH OFFICE	3.7M
SYSTEM ENHANCEMENT	.6M
ADDITIONAL PALLET STORAGE	13.1M
PALLET RACK SYSTEM	7.9M
ACTIVE ITEMS EXPANSION	1.2M

TOTAL \$241.8M

# Hazardous Sites

**DDMT-Primary**

**DDOU-Primary**

**DDRV-Primary**

## MILCON/Storage Aid Systems (SAS)

### DDRV

### Other:

<b>Oil Storage</b>	<b>\$9.5 (M)</b>
<b>Convert Haz W12</b>	<b>6.5</b>
<b>Processing Facility</b>	<b>3.6</b>
<b>Equip Haz Mat W12</b>	<b>.4</b>
<b>Haz Mat W5</b>	<b>7.3</b>
<b>Equip Haz Mat W5</b>	<b>.8</b>
	<hr/>
	<b>\$28.1</b>

<b>DDSP</b>	<b>\$9.1</b>
<b>DDTP</b>	<b>1.9</b>
<b>DDL P</b>	<b>5.4</b>
<b>DDAG</b>	<b>4.2</b>
<b>DDAA</b>	<b>1.6</b>
	<hr/>
	<b>\$22.2 *</b>

**DDMT Hazmat Cancelled Nov 94**

\*SAS not programmed

## **X DEPOT - DDAG**

- **NO MECHANIZATION**
- **16 BUILDINGS**
- **MOWASP CONTROL SYSTEM**
- **NO COBRA ANALYSIS - ASSOCIATED COST -  
MILCON/MATERIAL HANDLING SYSTEMS**

***HOW MUCH? \$s \$s \$s***

# CONCLUSIONS MILCON

- BULK VS. BIN - WHY? DDMT IS BULK (SUBSISTENCE, CLOTHING, TEXTILES, MEDICAL, HAZARDOUS, CONSTRUCTION, GENERAL, INDUSTRIAL)
- 22M CUBIC FEET SHORTFALL SAS (NO MILCON)  
GPW: \$31,680,000  
AIRCRAFT HANGER AS/RS: \$136,136,000
- BIN: GOCO/CONTRACT OUT  
DLA CORPORATE PLAN
- MOBILIZATION: WORKLOAD DESERT STORM

<u>DEPOT/ACTIVITY</u>	<u>SHORT TONS</u>	<u>%</u>
DDMT	107,324	42
DDRV	47,574	18
DDRW	40,257	15
DDMP	38,790	15
DDOU	22,592	19
DDCO	1,766	1

## DDRE MILCON/PDA (MATERIAL HANDLING SYSTEMS)

<b><u>DDSP</u></b>				
<b><u>FY</u></b>	<b><u>DEPOT/PROJECT</u></b>	<b><u>MILCON (\$)</u></b>	<b><u>PDA (\$)</u></b>	<b><u>REMARKS:</u></b>
FY89	E: ROADWAY CONNECTS	8.3		
FY90	E: HAZMAT PROCESS/STORAGE 124,000SF	9.1		ARMY FUNDED (?)
FY93	E: EDC ENHANCEMENTS		.6	DSS/AWOS ENHANCEMENTS
	E: PALLET RACK SYSTEM 80 SERIES WHSES		3.3	KOREAN WAR ERA
	E: TIRE STORAGE AIDS		1.3	TACOM TIRES
FY94	E: TIRE STORAGE AIDS		1.3	WRIGHT PATT AFB
	E: EQUIP HAZMAT		.6	FY90 MILCON
FY95	W: WIRE & CABLE SYSTEM		.8	DEFER-NAVY TRANSFER
FY96	E: DISPATCH OFFICE - 5,304 SF	3.7		SCOPE
	E: FAMILY HOUSING	3.7		
	E: INDUSTRIAL STORAGE		2.0	DEFER

DDRE MILCON/PDA (MATERIAL HANDLING SYSTEMS)

<u>DDSP</u>						
<u>FY</u>	<u>DEPOT/PROJECT</u>	<u>MILCON (\$)</u>	<u>PDA (\$)</u>	<u>REMARKS:</u>		
FY97	E: GPW 150,000 SF TANK TRACK	(6.0)		CANCELLED		
	E: FAMILY HOUSING	3.8				
	E: EDC ACTIVE ITEM EXPANSION		1.2	DEFER, HARDWARE		
	W: WALK & PICK SYSTEM B10/IMC		.43	NAVY		
	W: BULK RECEIVING MECH B109		1.2	DEFER-CONVEYOR UPGRADE/ADDITION		
FY98	E: FAMILY HOUSING	4.0				
	E: RPL TRANSPORTER DOCKS		.9			
	E: RPL GPW 3 & 4 420,000 SF	20.0		DEFER-WWI ERA		
	E: LTL FRT CONSOLIDATION B402		2.8	DEFER-DDMT EXISTING		
	W: PALLET STORAGE RACK B03		2.0	ROOF COLLAPSE		
FY99	W: PALLET STORAGE RACK B04		2.0	ROOF COLLAPSE		
	E: EQUIP GPW 3&4		6.6	DEFER-FY98 MILCON		

**DDRE MILCON/PDA (MATERIAL HANDLING SYSTEMS)**

<b><u>DDSP</u></b>				
<b><u>FY</u></b>	<b><u>DEPOT/PROJECT</u></b>	<b><u>MILCON (\$)</u></b>	<b><u>PDA (\$)</u></b>	<b><u>REMARKS:</u></b>
FY00	W: RPL GPW B103 200,000 SF	8.3		DEFER-WWII
	W: STEEL STORAGE & HANDLING COMPLEX B402		6.0	DEFER-CANTILEVER RACK
	W: PALLET STORAGE SYSTEM B508		2.2	DEFER-ADD STORAGE SPACE
FY01	E: ADDITION TO EDC	13.1		DEFER
	E: EQUIP GPW B103-PALLET RACK		3.7	DEFER-FY00 MILCON
FY02	E: EQUIP EDC-PALLET RACK		7.9	DEFER-FY01 MILCON
	TOTAL	74.0	46.83	120.83
	Cost Avoidance	41.4	33.20	74.60

**DDRE MILCON/PDA (MATERIAL HANDLING SYSTEMS)**

<b><u>DDRV</u></b>				
<b><u>FY</u></b>	<b><u>DEPOT/PROJECT</u></b>	<b><u>MILCON (\$)</u></b>	<b><u>PDA (\$)</u></b>	<b><u>REMARKS:</u></b>
FY94	SHED STORAGE 438,000 SF	9.5		OIL DRUMS
	HAZMAT CONVERT W12 120,000 SF	6.5		DEFER
	CONSTRUCT HAZMAT PROCESS FACILITY 42,000 SF	3.6		DEFER-CENTRALIZE REC, PACK, SHIP. ALREADY EXISTS B4
FY96	PALLET RACK SYSTEM		3.4	DEFER-CONVERT AWARES OPER AREA
	ODS CYLINDER		.9	
FY97	EQUIP HAZMAT PROC & HAZMAT W12		.4	DEFER-FY94 MILCON
FY98	HAZMAT W5 120,000 SF	7.3		DEFER-CONSTRUCT NEW
FY99	EQUIP HAZMAT W5		.8	DEFER-FY98 MILCON
	TOTAL	26.9	5.5	32.4
	Cost Avoidance	10.1	3.8	13.9

## DDRE MILCON/PDA (MATERIAL HANDLING SYSTEMS)

<b><u>DDNV</u></b>				
<b><u>FY</u></b>	<b><u>DEPOT/PROJECT</u></b>	<b><u>MILCON (\$)</u></b>	<b><u>PDA (\$)</u></b>	<b><u>REMARKS:</u></b>
FY93	COLD STORAGE 83,900SF ADDITION 43,000SF-RENO	12.4		COMPL SEP 95
FY96	RPL GPW W104/106 140,000 SF	10.4		DEFER:BULK STORE AIRCRAFT DLRs-VACATE SOUTH ANNEX-ALREADY VACATED
	RECEIVING UPGRADE W13	2.1		DEFER-NISTARS RECEIVING (1)
FY97	EQUIP GPW W104/106-PALLET RACK, NESTAINERS, BULK STORAGE		2.0	DEFER-FY96 MILCON (2)
	UPGRADE HOTLINE PACK CONVEYOR W143		1.3	HIGH PRIORITY PACK
	BULK AS/RS PALLET SYSTEM PH 1 V-147		4.2	DEFER-CONVERT AIRCRAFT MAINT FAC (3)
FY98	RPL GPW Y100A 159,840SF	9.3		DEFER-AIRCRAFT DLRs & FREIGHT TERMINAL
	UPGRADE MINILOAD SYSTEM W-143		3.0	DEFER-10 CRANE SYSTEM-BIN (4)
	BULK AS/RS PALLET SYSTEM PH 2 V-147		3.5	DEFER-CONVERT AIRCRAFT MAINT FAC (3)
FY99	EQUIP GPW Y100A PALLET RACK CONVEYOR		4.2	DEFER-CONVEYOR/SORTER FOR FREIGHT TERMINAL
	REPLACE TOTE CONVEYOR SYSTEM PH 1 B-143		2.03	DEFER-CONNECTS FLOOR 2-5 (5)
	BULK AS/RS PALLET SYSTEM PH <sup>1</sup> 3 V-147		4.2	DEFER-CONVERT AIRCRAFT MAINT FAC (3)

## DDRE MILCON/PDA (MATERIAL HANDLING SYSTEMS)

<b><u>DDNV</u></b>				
<b><u>FY</u></b>	<b><u>DEPOT/PROJECT</u></b>	<b><u>MILCON (\$)</u></b>	<b><u>PDA (\$)</u></b>	<b><u>REMARKS:</u></b>
FY00	RPL PALLET TRANSP SYSTEM W-135/143		.5	RPL PALLET CONVEYOR BETWEEN BLDGS
	TRANSPORTER DOCKS		.6	DEFER-STRADDLE TRUCKS AVAILABLE DDCS. DOCKSIDE DELIVERY
	RPL TOTE CONVEYOR B-143 PH 2		2.0	DEFER-TRANSFER RECEIPTS/ISSUES BETWEEN FLOOR (5)
	BULK AS/RS PALLET SYSTEM PH 4		3.5	DEFER-CONVERT AIRCRAFT MAINT FAC (3)
FY01	RPL TOTE CONVEYOR B-143 PH 3		2.03	DEFER-TRANSFER RECEIPT/ISSUE BETWEEN FLOOR
	TOTAL	34.2	33.03	67.23
	Cost Avoidance	21.8	31.26	53.06

# DDNV: SUPPLEMENTAL

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1. RECEIVING - 25 YEAR OLD, ANTIQUATED LABOR INTENSIVE,  
NO OTHER ALTERNATIVES BUT COMPLETE REPLACEMENT  
DOES NOT MEET REQUIRED PROCESSING CAPACITIES  
IMPACTS ON-TIME-EXCESSIVE LABOR  
MAINTENANCE INTENSIVE

PROJECTED WORKLOAD: 1000 LI/DAY                      SURGE: 1,800 LI/DAY  
150 IN/300 OUT RODS/DAY  
100 TRANSHIPMENTS/DAY

2. W104/106 - 15% WAREHOUSE SUBSTANDARD

3. AS/RS PALLET SYSTEM V-147 (400') (384') (45'h) = 6,912,000 CF

97 - PH1     \$4.2

98 - PH2     3.5

99 - PH3     4.2

01 - PH4     \$3.5

\$15.4

4. MINILOAD SYSTEM - SYSTEM DESIGN: 590,000 BIN LOCATIONS  
 4,500 ISSUES  
 1,500 RECEIPTS  
 CURRENT: 2,700 ISSUES  
 1,000 RECEIPTS  
 50-60% OCCUPANCY

ADDITIONAL BIN LOCATIONS NOT REQUIRED

5. TOTE CONVEYOR SYSTEM B-143	99 - PH1	\$4.2
	00 - PH2	2.0
	01 - PH3	2.0
		<u>2.0</u>
		\$8.2

6. NADEP CLOSURE BRAC '93	
FY96 GPW W104/106	\$10.4
FY97 EQUIP GPW	2.0
FY98 GPW Y100A	9.3
FY99 EQUIP GPW	<u>4.2</u>
	\$25.9

DEFER ABOVE PROJECTS DUE TO NADEP CLOSURE AND  
 TRANSITION OF WORKLOAD BY SEP 96.

## DDRE MILCON/PDA (MATERIAL HANDLING SYSTEMS)

<b><u>DDCO</u></b>				
<b><u>FY</u></b>	<b><u>DEPOT/PROJECT</u></b>	<b><u>MILCON (\$)</u></b>	<b><u>PDA (\$)</u></b>	<b><u>REMARKS:</u></b>
FY91	GPW 200,000 SF	6.5		COMPLETE
	EQUIP GPW		2.4	COMPLETE
FY96	REPLACE TRANSPORTER DOCKS		.3	
FY97	RECEIVING UPGRADE B41-1/42-1		1.96	DEFER
FY98	CANTILEVER PIPE RACK B10		.6	DEFER-DDMT
	MECHANIZE MATERIAL MOVEMENT W30		1.3	DEFER-5 EA MANNED TRACTOR/TOW VEHICLES
FY00	GPW 13 280,000SF REENGINEERED-RPL SHED	7.0		DEFER
	GPW 1 283,100 SF C&T/BULK CLOTHING	18.9		DEFER-DDMT C&T GPW 2
FY01	GPW 3 200,000 SF BULK STORAGE DEMO	10.3		DEFER
	EQUIP GPW 1 PALLET RACK SYSTEM		3.24	DEFER-FY00 MILCON-C&T
FY02	EQUIP GPW 3		2.6	DEFER-COST ESTIMATE ONLY. NOT ACTUAL
	TOTAL	42.7	12.4	55.1
	Cost Avoidance	36.2	9.7	45.9

## DDRE MILCON/PDA (MATERIAL HANDLING SYSTEMS)

<b><u>DDMT</u></b>				
<b>FY</b>	<b><u>DEPOT/PROJECT</u></b>	<b><u>MILCON (\$)</u></b>	<b><u>PDA (\$)</u></b>	<b><u>REMARKS:</u></b>
FY91	GPW II W360	6.5		UNDER CONSTRUCTION
FY96	UPGRADE CONVEYOR MEDICAL W359		.73	
FY97	TRASH TAKE-AWAY CENTRAL PACK		.3	DEFER
	REPLACE PART TOWVEYOR SYSTEM		1.6	
	PKG/PALLET RACK SYSTEM		1.45	COMPLETE BIN COMPLEX RACK SYSTEM
	EQUIP GPW II W360		2.1	FY91 MILCON
FY98	CENTRAL RECEIVING MOD W490		1.54	DEFER
	ADD CAROUSELS W690, SEC 2		2.5	DEFER
FY99	RPL GPW S559	10.1		DEFER
FY00	RPL SHED S873	4.7		
	RPL SHED S875	5.1		
	EQUIP GPW 559		2.5	DEFER-FY99 MILCON
	DDMT HAZ WHSE CANCELLED APR 93 BY DDRE.			

**DDRE MILCON/PDA (MATERIAL HANDLING SYSTEMS)**

<b><u>DDMT</u></b>				
<b><u>FY</u></b>	<b><u>DEPOT/PROJECT</u></b>	<b><u>MILCON (\$)</u></b>	<b><u>PDA (\$)</u></b>	<b><u>REMARKS:</u></b>
FY01	RPL SHED S970	5.4		
	TOTAL	31.8	12.72	44.52
	Cost Avoidance	10.1	6.8	<u>16.94</u>

**DDRE MILCON/PDA (MATERIAL HANDLING SYSTEMS)**

<b><u>DDTP</u></b>				
<b><u>FY</u></b>	<b><u>DEPOT/PROJECT</u></b>	<b><u>MILCON (\$)</u></b>	<b><u>PDA (\$)</u></b>	<b><u>REMARKS:</u></b>
FY93	HAZMAT	1.9		ARMY FUNDED
FY96	RECEIVING		.3	
FY97	PALLET STORAGE RACK B5		.9	
	TOTAL	1.9	1.2	3.1

**DDRE MILCON/PDA (MATERIAL HANDLING SYSTEMS)**

<b><u>DDL</u></b>				
<b><u>FY</u></b>	<b><u>DEPOT/PROJECT</u></b>	<b><u>MILCON (\$)</u></b>	<b><u>PDA (\$)</u></b>	<b><u>REMARKS:</u></b>
FY93	HAZMAT WHSE	5.4		BUILDING OCCUPANCY DATE AUG 95
FY96	LARGE GUN TUBE STORAGE		.4	
FY98	RECEIVING MECHANIZATION		3.02	
FY99	EMISSION CONTROL	5.4		
	TOTAL	10.8	3.42	14.22

**DDRE MILCON/PDA (MATERIAL HANDLING SYSTEMS)**

<b><u>DDAG</u></b>				
<b><u>FY</u></b>	<b><u>DEPOT/PROJECT</u></b>	<b><u>MILCON (\$)</u></b>	<b><u>PDA (\$)</u></b>	<b><u>REMARKS:</u></b>
FY93	UPGRADE HAZMAT W1260	2.3		DEFER-DUPLICATION OF FACILITIES
FY99	CONSTRUCT SHELTER	1.3		
FY96	BULK CLOTH HANDLING		.2	
	TOTAL	3.6	.2	3.8
	Cost Avoidance	1.3		1.3

DDRE MILCON/PDA (MATERIAL HANDLING SYSTEMS)

	<u>DDCN</u>								
<u>FY</u>	<u>DEPOT/PROJECT</u>	<u>MILCON (\$)</u>	<u>PDA (\$)</u>	<u>REMARKS:</u>					
FY96	STORAGE UPGRADE		1.9						

**DDRE MILCON/PDA (MATERIAL HANDLING SYSTEMS)**

<b><u>DDWG</u></b>				
<b><u>FY</u></b>	<b><u>DEPOT/PROJECT</u></b>	<b><u>MILCON (\$)</u></b>	<b><u>PDA (\$)</u></b>	<b><u>REMARKS:</u></b>
FY96	CONVEYOR MOD B641		.4	
FY97	CENTRAL SHIP CONEYOR B376		4.4	
	AEROSPACE GROUND SUPPORT EQUIP (AGE) STORAGE SYSTEM		2.0	
FY98	NARROW AISLE PALLET RACK B366		2.0	RPM TO REPAIR ROOF - COST (?)
	SBSS STORAGE SYSTEM B364		1.6	STANDARD BASE SUPPORT SUPPLY
FY99	PALLET RACK SYSTEM B365		2.0	RPM TO REPAIR ROOF - COST (?)
FY00	PALLET RACK STORAGE B367		2.0	RPM TO REPAIR ROOF - COST (?)
	TOTAL		14.4	

**DDRE MILCON/PDA (MATERIAL HANDLING SYSTEMS)**

<b><u>DDJF</u></b>				
<b><u>FY</u></b>	<b><u>DEPOT/PROJECT</u></b>	<b><u>MILCON (\$)</u></b>	<b><u>PDA (\$)</u></b>	<b><u>REMARKS:</u></b>
FY97	PACKAGE CONVEYOR W110		.2	
FY98	GPW 200,000 SF CS/PE CLOSED BY FY98	8.2		
FY99	EQUIP GPW		2.8	FY98 MILCON
	TOTAL	8.2	3.0	11.2

**DDRE MILCON/PDA (MATERIAL HANDLING SYSTEMS)**

<b><u>DDAA</u></b>				
<b><u>FY</u></b>	<b><u>DEPOT/PROJECT</u></b>	<b><u>MILCON (\$)</u></b>	<b><u>PDA (\$)</u></b>	<b><u>REMARKS:</u></b>
FY96	VEHICLE STORAGE SHELTER	2.6		
	MECH WEAPONS REC B112		.07	
FY98	UPGRADE POWER & FREE		2.7	
FY99	COMBAT VEHICLE STORAGE	24.0		
	HAZMAT	1.6		DEFER-DUPLICATION OF FACILITIES. SERVICE ICPs NOT WANTING TO MOVE MATERIAL
	TOTAL	28.2	2.77	30.97
	Cost Avoidance	1.6		1.6



## **SAILS DDMT'S ANALYSIS**

- **INFRASTRUCTURE COST SUMMARY OVERSTATED BY \$1.3M\***
- **SUPPLIER CONSIDERED FIXED - NOT TRUE - SUPPLIER IS A VARIABLE. THEREFORE, REPLENISHMENT TRANSPORTATION COSTS/FIRST DESTINATION TRANSPORTATION OVERSTATED - ALSO, SUPPLIERS ARE NOT REPRESENTATIVE OF DDMT SUPPLIERS\*\***
- **OUTBOUND TRANSPORTATION COSTS/SECOND DESTINATION TRANSPORTATION OVERSTATED - CUSTOMERS ARE NOT REPRESENTATIVE OF DDMT CUSTOMERS\*\***

**SOURCE: \* FINANCIAL REPORTS**

**\*\*DEFENSE MANPOWER DATA CENTER**

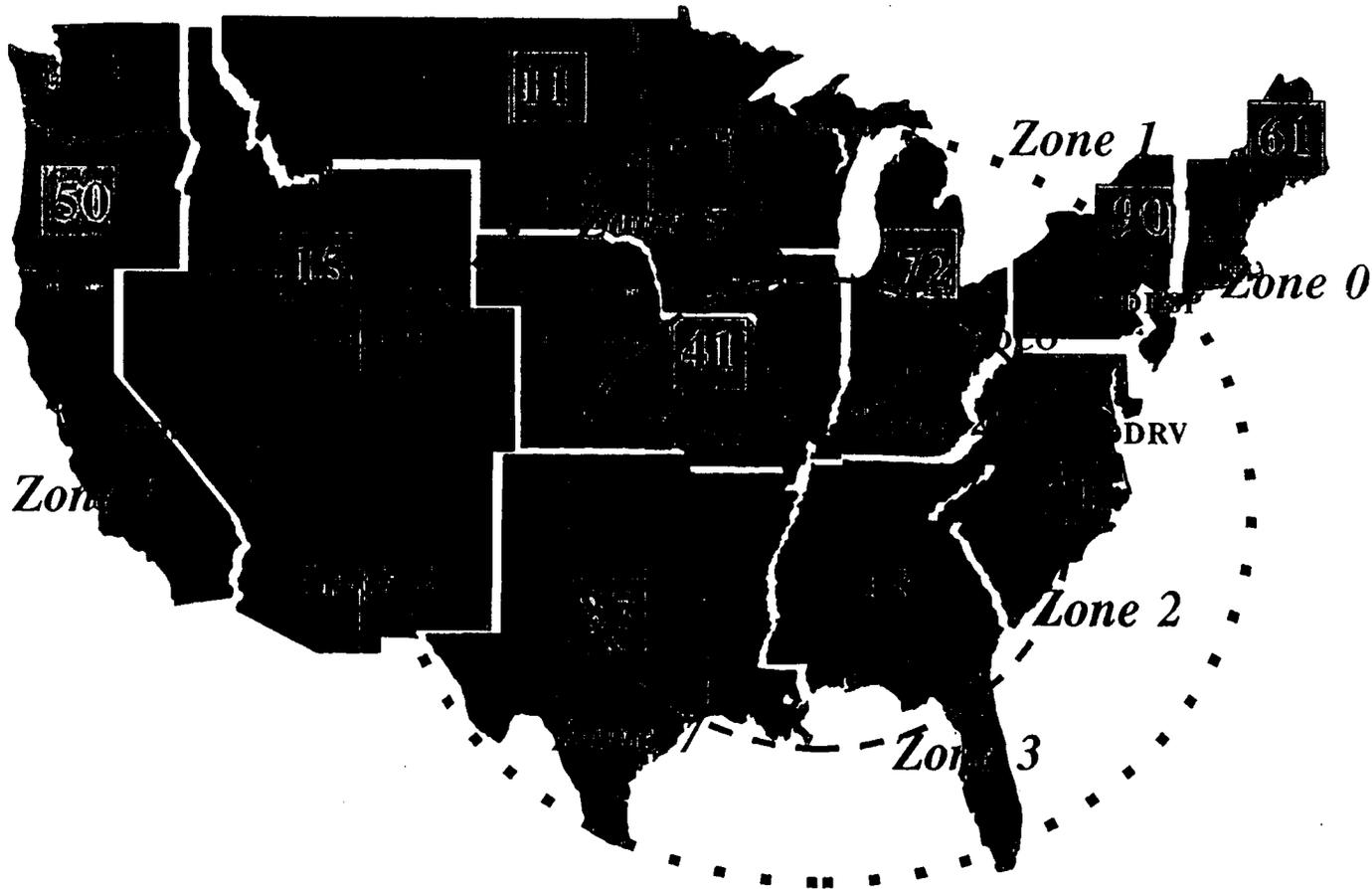
DDMT (JY)  
INFRASTRUCTURE COST SUMMARY  
STRATEGIC ANALYSIS OF INTEGRATED LOGISTICS SYSTEMS (SAILS)  
(THOUSANDS OF DOLLARS)

\$ 16,406	SAILS INFRASTRUCTURE COST
<u>\$ 15,095*</u>	DDMT FY 94 INFRASTRUCTURE COST
\$ 1,311	OVERSTATED
\$ 10,877	INFRASTRUCTURE OBLIGATIONS (JY)
+ 1,247	RPM > \$25K - (JQ)
+ 2,742	UTILITIES (D4)
+ 1,088	OTHER P900 - (D4)
+ 1,528	P960/970 - (D4)
- <u>2,387</u>	P900 REIMBURSEMENTS
\$ 15,095*	DDMT FY94 INFRASTRUCTURE COST

SOURCE: SAILS  
DISTRIBUTIONS INFRASTRUCTURE COST ANALYSIS  
OBLIGATIONS REPORT - RCS 48 (JY) 94  
OBLIGATIONS REPORT - RCS 48 (D4) 94  
BRACVI.XLS SPREADSHEET

# TOTAL SUPPLIERS BY ZONE

SAILS

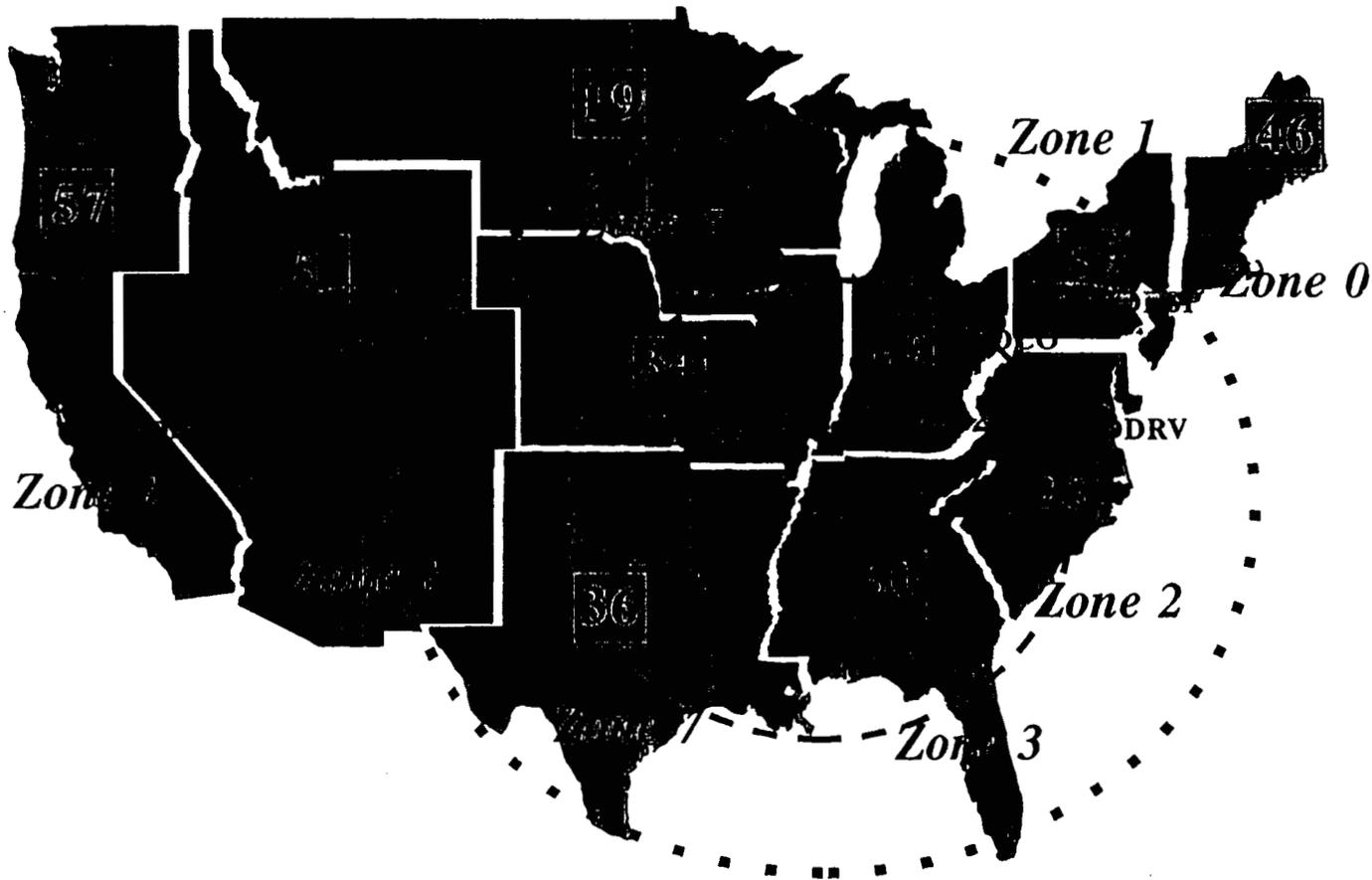


----- 24 Hour Truck Delivery

..... 48 Hour Truck Delivery

Note: Total Suppliers = 479

# TOTAL SUPPLIERS BY ZONE BASED ON PHYSICAL INVENTORY



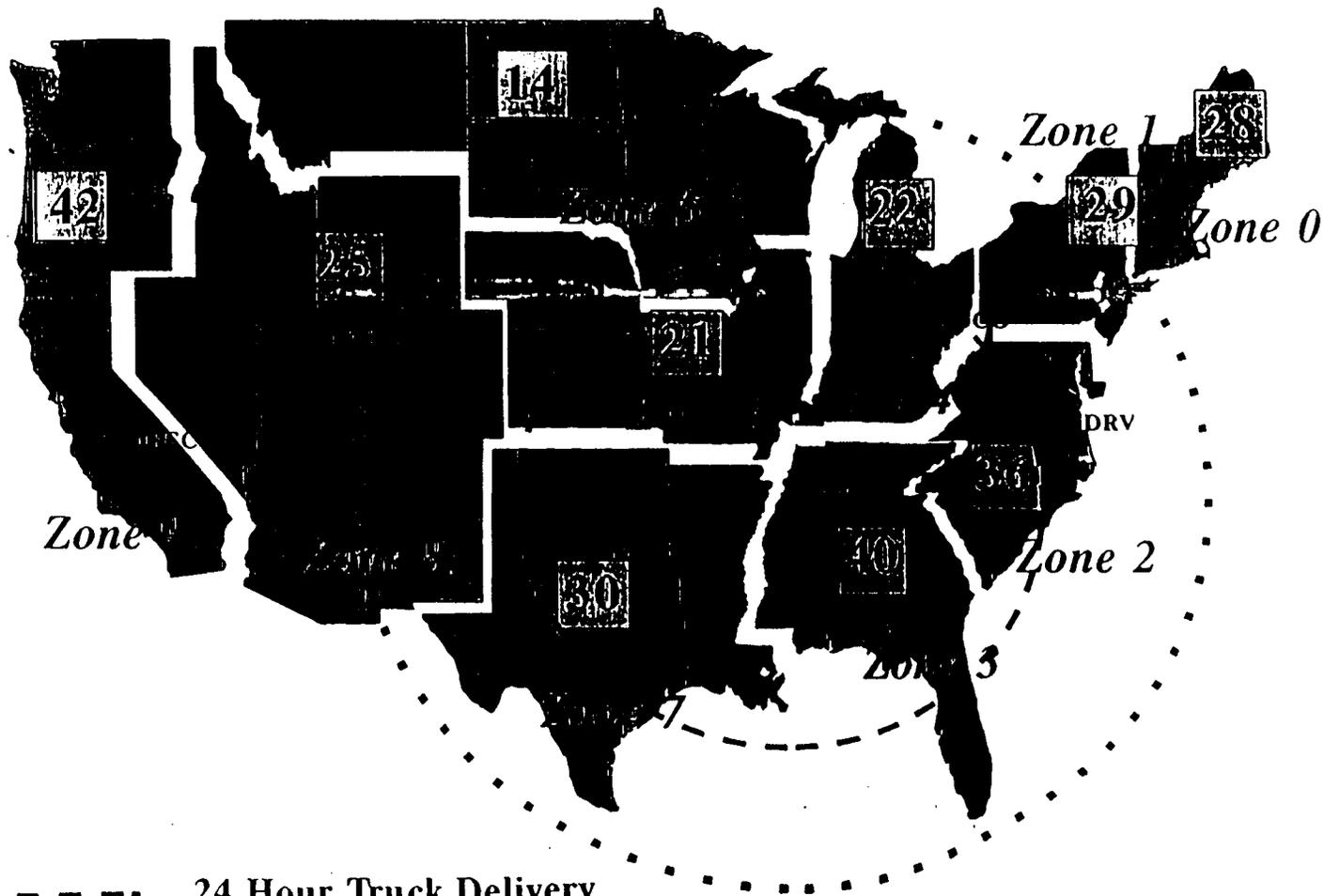
----- 24 Hour Truck Delivery

..... 48 Hour Truck Delivery

Note: Total Suppliers = 400

# TOTAL CUSTOMERS BY ZONE

SAILS



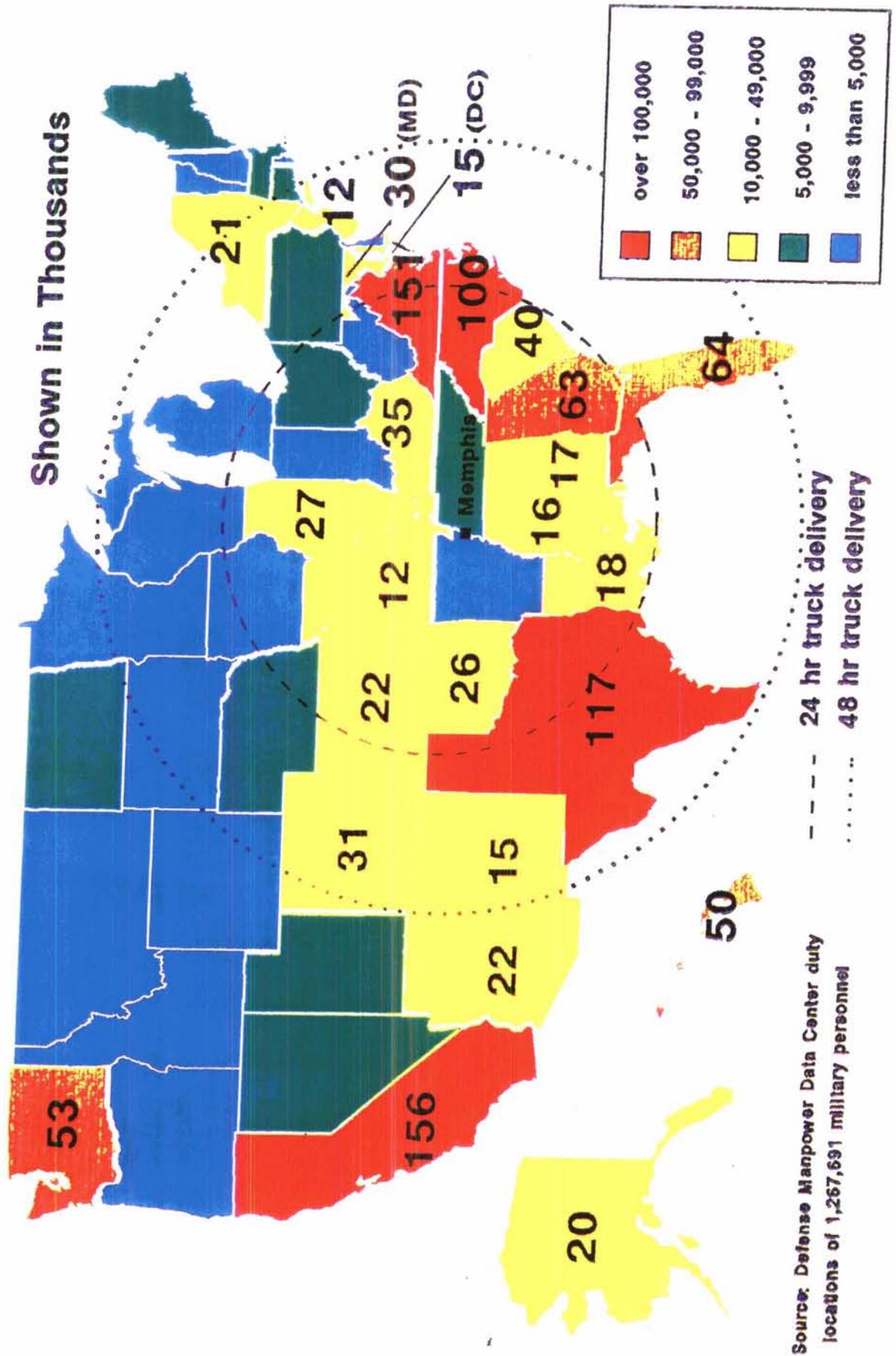
----- 24 Hour Truck Delivery  
 ..... 48 hour Truck Delivery

Note: Total Customers = 287

## **RERUN SAILS**

- **REDUCE INFRASTRUCTURE COST BY \$1.3M**
- **INCREASE THROUGHPUT CAPACITY TO 30,476 LINES**
- **REVISE SUPPLIERS TO REFLECT DLA-OWNED/PROCURED MATERIAL**
- **REVISE CUSTOMERS TO REFLECT MAJOR MILITARY TROOP CONCENTRATION AREAS**

# TOTAL TROOP STRENGTH BY STATE





## AVERAGE DAILY THROUGHPUT

<u>DEPOT</u>	<u>ISSUES</u>	<u>RECPTS</u>	<u>TOTAL</u>	<u>TOTAL W/O CCP</u>
DDSP	17111	7953	25064	21027
DDJC	14696	2680	17376	14777
DDMT	10131	674	10805	10805
DDCO	8738	1375	10113	10113
DDOU	8414	1270	9684	9684
DDRV	8063	1384	9447	9447
DDDC	5530	2436	7966	7966
DDNV	6622	3650	10272	7939 (W/O ISSOT)
DDOO	3622	2354	5976	5976
DDST	3753	1462	5215	5215
DDWG	2788	1879	4667	4667
DDMC	2630	1750	4380	4380
DDHU	2489	1661	4150	4150
DDRT	3012	978	3990	3990
DDJF	2186	1347	3533	3533
DDLPL	1334	740	2074	2074
DDTP	703	489	1192	1192
DDAG	283	185	468	468
DDBC	136	171	307	307

## AVERAGE DAILY THROUGHPUT

	DDMT			DDSP			DDJC			DDRV		
	Issue	Receipt	Total	Issue	Receipt	Total	Issue	Receipt	Total	Issue	Receipt	Total
Bin	5572	357	5929	11838	2998	14836	8107	1984	10091	5666	1154	6820
Bulk	4188	302	4490	4555	750	5305	3889	688	4577	1768	187	1955
Haz	323	13	336	718	168	886	101	8	109	629	43	672
Chill	48	2	50	0	0	0	0	0	0	0	0	0
CCP	0	0	0	0	4037	4037	2599	0	2599	0	0	0
<b>TOTAL</b>	<b>10131</b>	<b>674</b>	<b>10805</b>	<b>17111</b>	<b>7953</b>	<b>25064</b>	<b>14696</b>	<b>2680</b>	<b>17376</b>	<b>8063</b>	<b>1384</b>	<b>9447</b>
<b>W/o CCP</b>	<b>10131</b>	<b>674</b>	<b>10805</b>	<b>17111</b>	<b>3916</b>	<b>21027</b>	<b>12097</b>	<b>2680</b>	<b>14777</b>	<b>8063</b>	<b>1384</b>	<b>9447</b>

	DDCO			DDNV			DDJF			DDL P		
	Issue	Receipt	Total	Issue	Receipt	Total	Issue	Receipt	Total	Issue	Receipt	Total
Bin	7260	819	8079	3741	1784	5525	1811	1021	2832	892	484	1376
Bulk	1478	556	2034	1822	1707	3529	371	325	696	442	256	698
Haz	0	0	0	19	9	28	4	1	5	0	0	0
Chill	0	0	0	1040	150	1190	0	0	0	0	0	0
CCP	0	0	0	0	0	0	0	0	0	0	0	0
<b>TOTAL</b>	<b>8738</b>	<b>1375</b>	<b>10113</b>	<b>6622</b>	<b>3650</b>	<b>10272</b>	<b>2186</b>	<b>1347</b>	<b>3533</b>	<b>1334</b>	<b>740</b>	<b>2074</b>
<b>W/o CCP</b>	<b>8738</b>	<b>1375</b>	<b>10113</b>	<b>6622</b>	<b>3650</b>	<b>10272</b>	<b>2186</b>	<b>1347</b>	<b>3533</b>	<b>1334</b>	<b>740</b>	<b>2074</b>

	DDTP			DDWG			DDBC			DDHU		
	Issue	Receipt	Total	Issue	Receipt	Total	Issue	Receipt	Total	Issue	Receipt	Total
Bin	325	220	545	2078	1342	3420	95	121	216	1635	901	2536
Bulk	296	226	522	666	512	1178	41	50	91	807	738	1545
Haz	82	43	125	44	25	69	0	0	0	47	22	69
Chill	0	0	0	0	0	0	0	0	0	0	0	0
CCP	0	0	0	0	0	0	0	0	0	0	0	0
<b>TOTAL</b>	<b>703</b>	<b>489</b>	<b>1192</b>	<b>2788</b>	<b>1879</b>	<b>4667</b>	<b>136</b>	<b>171</b>	<b>307</b>	<b>2489</b>	<b>1661</b>	<b>4150</b>
<b>W/o CCP</b>	<b>703</b>	<b>489</b>	<b>1192</b>	<b>2788</b>	<b>1879</b>	<b>4667</b>	<b>136</b>	<b>171</b>	<b>307</b>	<b>2489</b>	<b>1661</b>	<b>4150</b>

	DDOU			DDOO			DDRT			DDST		
	Issue	Receipt	Total	Issue	Receipt	Total	Issue	Receipt	Total	Issue	Receipt	Total
Bin	6146	772	6918	1541	1017	2558	983	232	1215	1122	334	1456
Bulk	2005	481	2486	2074	1324	3398	1916	739	2655	2594	1118	3712
Haz	263	17	280	7	13	20	113	7	120	37	10	47
Chill	0	0	0	0	0	0	0	0	0	0	0	0
CCP	0	0	0	0	0	0	0	0	0	0	0	0
<b>TOTAL</b>	<b>8414</b>	<b>1270</b>	<b>9684</b>	<b>3622</b>	<b>2354</b>	<b>5976</b>	<b>3012</b>	<b>978</b>	<b>3990</b>	<b>3753</b>	<b>1462</b>	<b>5215</b>
<b>W/o CCP</b>	<b>8414</b>	<b>1270</b>	<b>9684</b>	<b>3622</b>	<b>2354</b>	<b>5976</b>	<b>3012</b>	<b>978</b>	<b>3990</b>	<b>3753</b>	<b>1462</b>	<b>5215</b>

	DDAG			DDDC			DDMC		
	Issue	Receipt	Total	Issue	Receipt	Total	Issue	Receipt	Total
Bin	3	2	5	2292	728	3020	1997	1145	3142
Bulk	278	181	459	2068	783	2851	593	603	1196
Haz	2	2	4	0	0	0	40	2	42
Chill	0	0	0	1170	925	2095	0	0	0
CCP	0	0	0	0	0	0	0	0	0
<b>TOTAL</b>	<b>283</b>	<b>185</b>	<b>468</b>	<b>5530</b>	<b>2436</b>	<b>7966</b>	<b>2630</b>	<b>1750</b>	<b>4380</b>
<b>W/o CCP</b>	<b>283</b>	<b>185</b>	<b>468</b>	<b>5530</b>	<b>2436</b>	<b>7966</b>	<b>2630</b>	<b>1750</b>	<b>4380</b>



## MAXIMUM SURGE THROUGHPUT CAPACITY

<u>DEPOT</u>	<u>ISSUES</u>	<u>RECPTS</u>	<u>TOTAL</u>	<u>TOTAL W/O CCP</u>
DDJC	18851	49095	67946	43594
DDSP	14574	47821	62395	38395
DDNV	3928	28190	32118	32118
DDMT	4386	26090	30476	30476
DDOU	2347	24960	27307	27307
DDHU	4500	21860	26360	26360
DDDC	3790	17114	20904	20904
DDOO	10375	8739	19114	19114
DDRV	3727	13386	17113	17113
DDCO	2383	11227	13610	13610
DDST	4150	8213	12363	12363
DDRT	1872	8782	10654	10654
DDWG	3102	4557	7659	7659
DDJF	2234	5090	7324	7324
DDMC	3139	3801	6940	6940
DDLPL	2304	1630	3934	3934
DDBC	575	2776	3351	3351
DDTP	1072	1670	2742	2742
DDAG	617	902	1519	1519

## MAXIMUM SURGE THROUGHPUT CAPACITY

	DDMT			DDSP			DDJC			DDRIV		
	Issue	Receipt	Total	Issue	Receipt	Total	Issue	Receipt	Total	Issue	Receipt	Total
Bin	20800	2950	23750	3712	27690	31402	2850	24420	27270	3000	11385	14385
Bulk	4850	1266	6116	1858	5121	6979	3544	11396	14940	565	1557	2122
Haz	392	168	560	0	0	0	225	1050	1275	160	440	600
Chill	48	2	50	4	10	14	56	53	109	2	4	6
CCP	0	0	0	9000	15000	24000	12176	12176	24352	0	0	0
<b>TOTAL</b>	<b>26090</b>	<b>4386</b>	<b>30476</b>	<b>14574</b>	<b>47821</b>	<b>62395</b>	<b>18851</b>	<b>49095</b>	<b>67946</b>	<b>3727</b>	<b>13386</b>	<b>17113</b>
<b>W/o CCP</b>	<b>26090</b>	<b>4386</b>	<b>30476</b>	<b>5574</b>	<b>32821</b>	<b>38395</b>	<b>6675</b>	<b>36919</b>	<b>43594</b>	<b>3727</b>	<b>13386</b>	<b>17113</b>

	DDCO			DDNV			DDJF			DDLIP		
	Issue	Receipt	Total	Issue	Receipt	Total	Issue	Receipt	Total	Issue	Receipt	Total
Bin	1575	9000	10575	1999	16000	17999	1123	3657	4780	1584	1010	2594
Bulk	808	2227	3035	1894	10000	11894	986	1323	2309	720	620	1340
Haz	0	0	0	35	630	665	25	40	65	0	0	0
Chill	0	0	0	0	1560	1560	100	70	170	0	0	0
CCP	0	0	0	0	0	0	0	0	0	0	0	0
<b>TOTAL</b>	<b>2383</b>	<b>11227</b>	<b>13610</b>	<b>3928</b>	<b>28190</b>	<b>32118</b>	<b>2234</b>	<b>5090</b>	<b>7324</b>	<b>2304</b>	<b>1630</b>	<b>3934</b>
<b>W/o CCP</b>	<b>2383</b>	<b>11227</b>	<b>13610</b>	<b>3928</b>	<b>28190</b>	<b>32118</b>	<b>2234</b>	<b>5090</b>	<b>7324</b>	<b>2304</b>	<b>1630</b>	<b>3934</b>

	DDTP			DDWG			DDBC			DDHU		
	Issue	Receipt	Total	Issue	Receipt	Total	Issue	Receipt	Total	Issue	Receipt	Total
Bin	516	865	1381	1924	3072	4996	400	2332	2732	17760	3656	21416
Bulk	383	599	982	1178	1485	2663	175	444	619	4100	844	4944
Haz	170	204	374	0	0	0	0	0	0	0	0	0
Chill	3	2	5	0	0	0	0	0	0	0	0	0
CCP	0	0	0	0	0	0	0	0	0	0	0	0
<b>TOTAL</b>	<b>1072</b>	<b>1670</b>	<b>2742</b>	<b>3102</b>	<b>4557</b>	<b>7659</b>	<b>575</b>	<b>2776</b>	<b>3351</b>	<b>21860</b>	<b>4500</b>	<b>26360</b>
<b>W/o CCP</b>	<b>1072</b>	<b>1670</b>	<b>2742</b>	<b>3102</b>	<b>4557</b>	<b>7659</b>	<b>575</b>	<b>2776</b>	<b>3351</b>	<b>21860</b>	<b>4500</b>	<b>26360</b>

	DDOU			DDOO			DDRT			DDST		
	Issue	Receipt	Total	Issue	Receipt	Total	Issue	Receipt	Total	Issue	Receipt	Total
Bin	22935	1612	24547	7893	4991	12884	646	4783	5429	1863	3150	5013
Bulk	2025	735	2760	2309	3661	5970	1214	3841	5055	2204	4913	7117
Haz	0	0	0	173	87	260	12	158	170	83	150	233
Chill	0	0	0	0	0	0	0	0	0	0	0	0
CCP	0	0	0	0	0	0	0	0	0	0	0	0
<b>TOTAL</b>	<b>24960</b>	<b>2347</b>	<b>27307</b>	<b>10375</b>	<b>8739</b>	<b>19114</b>	<b>1872</b>	<b>8782</b>	<b>10654</b>	<b>4150</b>	<b>8213</b>	<b>12363</b>
<b>W/o CCP</b>	<b>24906</b>	<b>2347</b>	<b>27307</b>	<b>10375</b>	<b>8739</b>	<b>19114</b>	<b>1872</b>	<b>8782</b>	<b>10654</b>	<b>4150</b>	<b>8213</b>	<b>12363</b>

	DDAG			DDDC			DDMC		
	Issue	Receipt	Total	Issue	Receipt	Total	Issue	Receipt	Total
Bin	170	241	411	9000	1344	10344	2335	1790	4125
Bulk	415	606	1021	3104	2280	5384	1406	1319	2725
Haz	32	55	87	88	32	120	60	30	90
Chill	0	0	0	4922	134	5056	0	0	0
CCP	0	0	0	0	0	0	0	0	0
<b>TOTAL</b>	<b>617</b>	<b>902</b>	<b>1519</b>	<b>17114</b>	<b>3790</b>	<b>20904</b>	<b>3801</b>	<b>3139</b>	<b>6940</b>
<b>W/o CCP</b>	<b>617</b>	<b>902</b>	<b>1519</b>	<b>17114</b>	<b>3790</b>	<b>20904</b>	<b>3801</b>	<b>3139</b>	<b>6940</b>



*America's Distribution Center*

B

**PRIMARY DISTRIBUTION SITE  
(DDMT)**



# **BRIEFING TOPICS**

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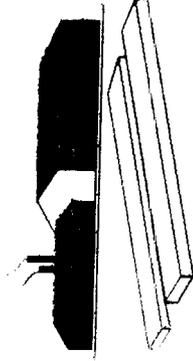
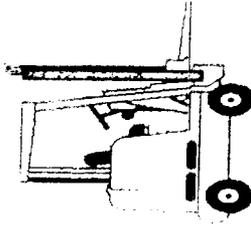
- MISSION**
- CAPABILITIES**
- PERFORMANCE**
- INSTALLATION**
- PERSONNEL**

# **Defense Distribution Depot Memphis, Tennessee**

## **Background**

- 1942 - 1962 Memphis General Depot  
Memphis Quartermaster Depot  
Memphis Army Service Forces Depot  
Memphis General Depot**
- 1962 - 1964 Memphis Army Depot**
- 1964 - 1991 Defense Depot Memphis**
- 1991 - 1993 Defense Distribution  
Region Central**
- 1993 - 1995 Defense Distribution Depot  
Memphis, Tennessee**

# Defense Distribution Depot Memphis, Tennessee



## MISSION:

Receive, Store and Ship materiel to our Customers.

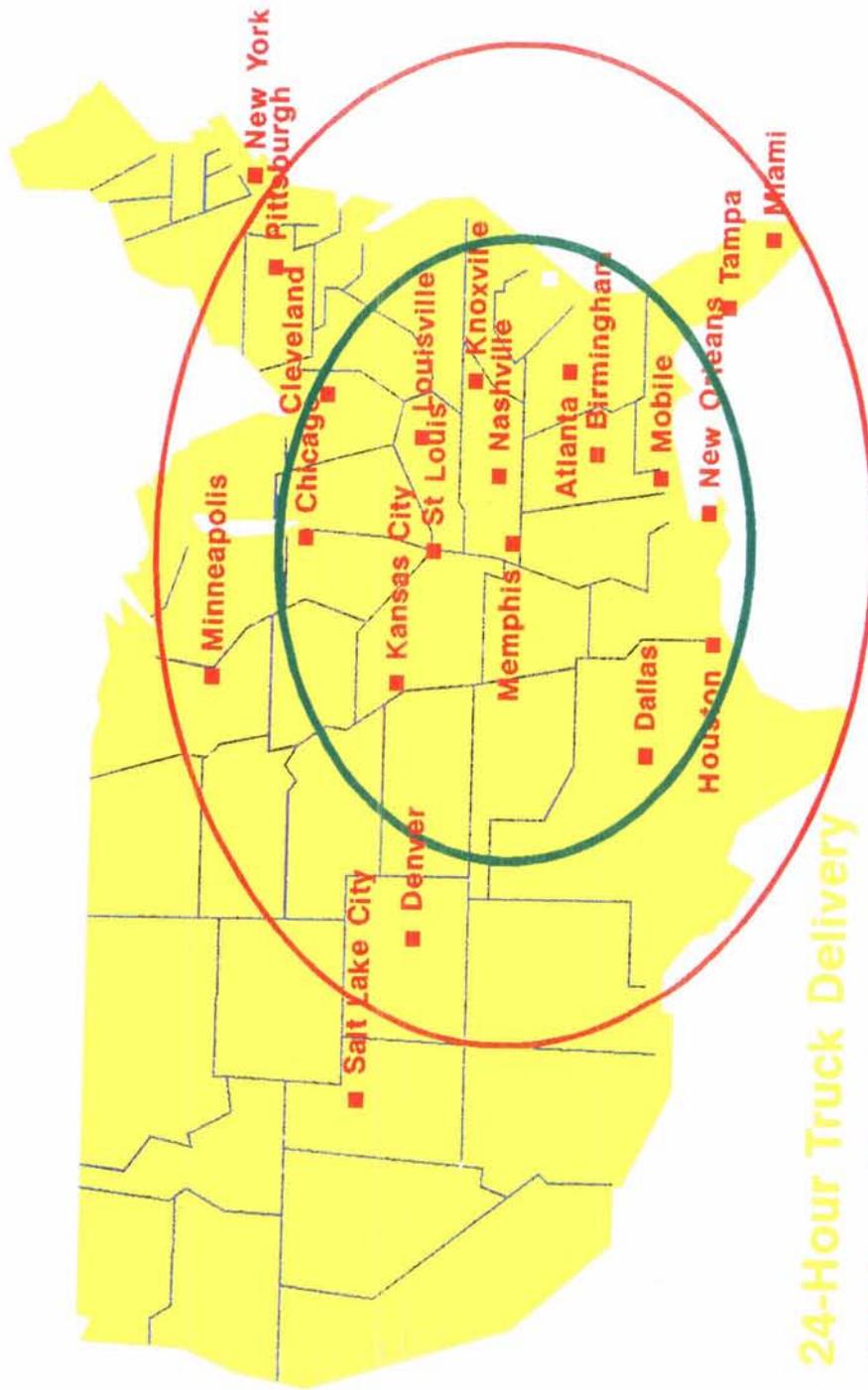
## GOAL:

"Provide EXACTLY the supplies and services our customers have a right to expect...Satisfy these requirements On Time, Every Time.

The Nation's Best Distribution Depot  
Worldwide Commitment, Dedicated People, Quality Service



# DDMT COUNTRY



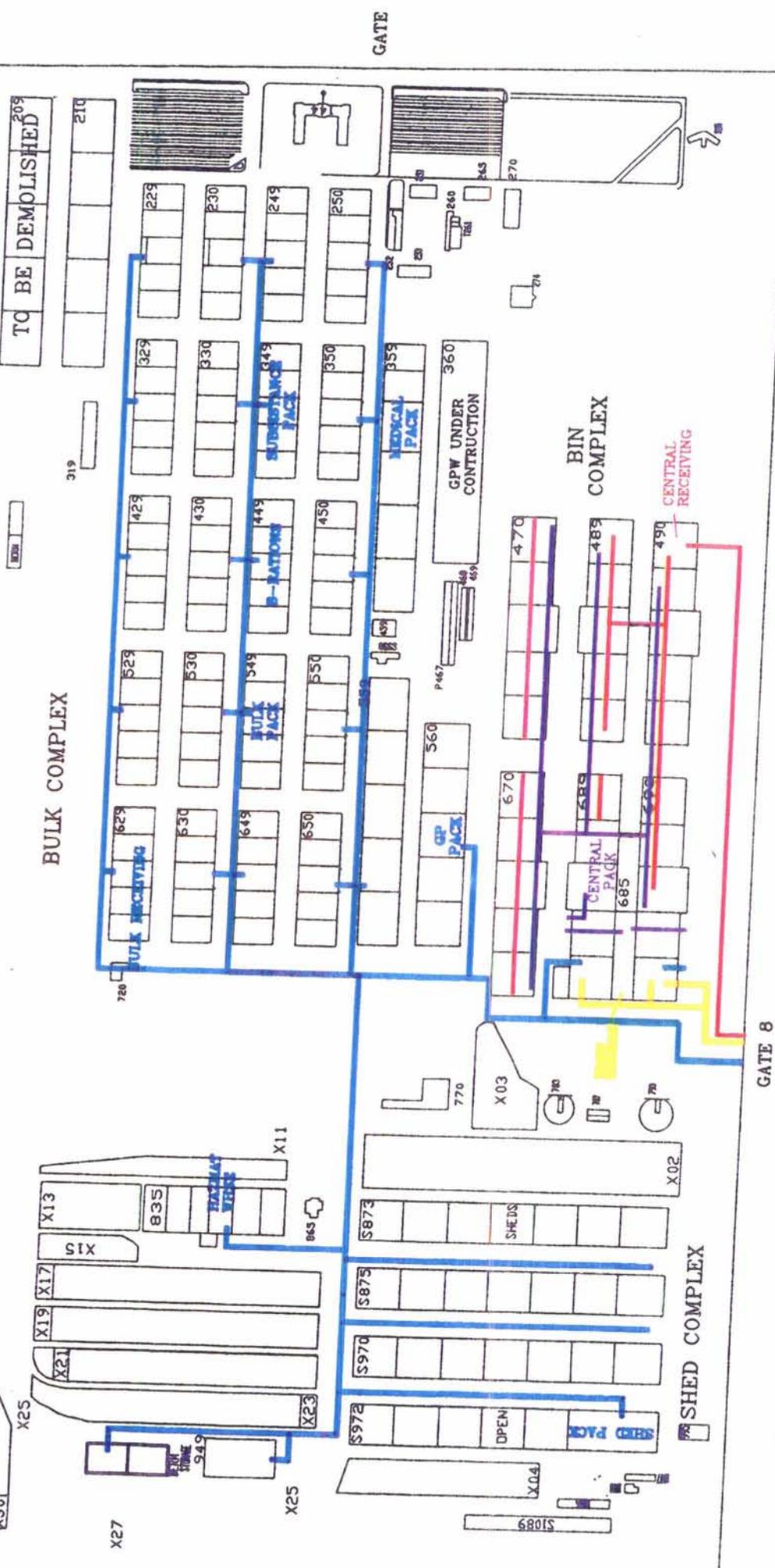
— 24-Hour Truck Delivery

— 48-Hour Truck Delivery

# DDM1 MATERIAL WAREHOUSE FLOW

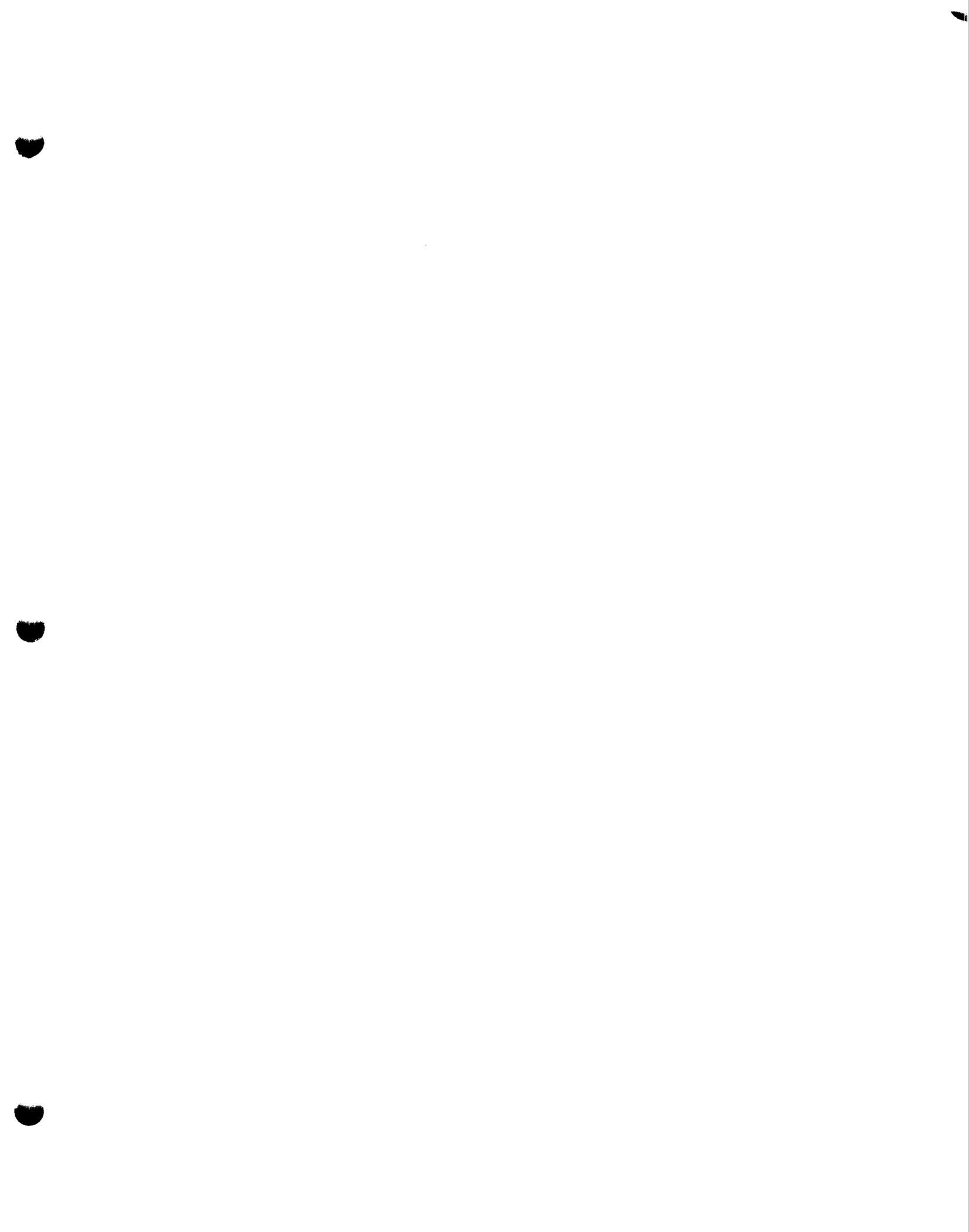
GATE 15

702



GATE 8

- BIN RECEIPTS/STOW
  - BIN PACK/CENTRAL PACK
  - BULK RECEIPTS/STOW/PACK/OUTLOAD
  - HAZARDOUS WASTE
- RECEIVING FULL TRUCK LOADS ALL BULK/SHED WHSSES  
TRANSPORTATION TERMINAL DEPOT WIDE  
INTRA-DEPOT TRANSPORTER TRUCK SERVICE



# **Distribution Capabilities**

---

- **Air**

- Memphis International**

- **#1 Air Cargo Airport**
    - **\$150M Expansion**
    - **FEDEX Super Hub**

- Carriers**

- **44 Air Carriers**
    - **9 Airlines**

- Military Air Terminals**

- **Millington NAS**
    - **Air National Guard (164th A.G.)**

# **Distribution Capabilities**

---

- **Surface (Motor Carriers)**
  - Highway System Infrastructure**
  - **65% of Population Reached Overnight Carriers**
  - **Over 200 Motor Freight Companies**
  - **UPS - Doubled Operations**
- **Rail**
  - Six Major Railroad Systems**
  - 96 Freight Trains In/Out Daily**
- **Water**
  - 2nd Largest Inland Waterport**
  - Accessable 11 Months/Year**

Memphis is one of the largest distribution centers in the United States, and is growing everyday. Centrally located in the United States, Memphis has quickly become one of America's largest distribution centers. Over sixty percent of the population of the United States can be reached overnight by truck from Memphis. The city lies at a "crossroads" between America's industrial facilities to the north and east, and its shipping and service industries to the south and west.

The city is served by over 200 common motor carriers, including all major motor freight carriers. Over 100 terminals offer direct service to all 48 contiguous states, as well as Canada, without interchange. Some of the major motor carriers include Averitt Express; Consolidated Freightways; MS Carrier; Overnite; Roadway Express; and Yellow Freightways. In fact, due to its central location and excellent highway access, Memphis is better situated than almost any other city to reach the maximum number of destinations overnight. Memphis is served by six major railroad systems. Owing to joint venture agreement between the six, shipments which once had to be interchanged at junction points are now handled as a single system, providing schedule improvements measured not in hours, but in days. Such single system shipments are available from Memphis to 42 states, as well as to Canada. Because of their central location, Memphis rail terminals serve as major hubs for east/west and north/south shipments. This allows numerous opportunities for shippers to take advantage of such routing operations as intermodal transfers. This advantage alone made DDMT's support of the Unitized B-Ration mission to Saudi Arabia so successful and less expensive by shipping west at a much lower cost, rather than east.

Railroads servicing Memphis are the Union Pacific system; Burlington Northern; CSX Corporation; Norfolk Southern; Southern Pacific; and the Illinois Central Gulf. Intermodal Yards are located at all six of the above rail yards. Memphis' rail carriers offer "super piggyback" capability daily to Los Angeles, with a running time of only 52 hours. In addition, Memphis has four double-stack trains operating to Southern California, Northern California, Seattle, and Portland on the West Coast. These trains provide lower rates than standard piggyback service to encourage the quick return of needed containers to steamship lines in West Coast ports. Such piggyback and double-stack capabilities gives efficient access to the Pacific port facilities, and again at a much cheaper rate than on the East Coast.

The Mississippi River is one of the most important reasons Memphis has become "America's Distribution Center". As part of the integral network of approximately 25,000 miles of navigable waterways, the Mississippi River remains the most cost-effective method of transporting bulk goods and commodities.

Memphis offers a multitude of transportation options designed to take advantage of the Mississippi River. In waterborne commerce, the Port of Memphis is the second largest inland port on the Mississippi River. More than 13 million tons of cargo is handled each year through this port, which features five public terminals and numerous privately owned terminals.

Barge shipments originating in Memphis are able to reach all navigable points on the nation's inland waterway system in a timely and efficient manner. The Mississippi River provides Memphis an approximately 80 hour delivery schedule to New Orleans. Shipment

to the eastern waterways require only about six days. Memphis is served by all major barge lines, including one which provides regular direct service to Puerto Rico, the United Kingdom, Northern Europe, the Middle East, and Southeast Asia. Memphis is served by four of the major steamship companies providing worldwide shipment of seavans. They are American President Lines; Sealand; Farrel; and Lykes.

As an added bonus, Memphis has a supplementary seaport. The Memphis Defense Depot is only six miles from the Lash Intermodal Terminal Company (LITCO) situated on the bank of the Mississippi. The LITCO facility transloads from truck and rail to Lash barges, 60 ft x 90 ft shallow draft barges, which are towed down the Mississippi River to New Orleans where they are loaded onto specialized ocean going vessels. At their destination country, the Lash Barges can be off-loaded from the mother vessel and towed to shallow harbors or up rivers for unloading. They can thus bypass congested deep water ports.

This Memphis Lash barge facility can transload and send downriver up to 50,000 tons per month. During a major mobilization and buildup, when coastal ports get crowded and their loading equipment presents a bottleneck to outbound sea cargo, the Memphis LITCO facility gives DoD a significant pressure release valve. LITCO can give another avenue for the outbound supplies needed by our troops. To take advantage of this alternate shipping route, the supplies should be stored in Memphis.

The Memphis International Airport is located just two miles from the Defense Depot. The airport is a designated full facility, large hub airport, is the major hub for several airlines (including Northwest), and is a major cargo hub for a number of air freight companies. With the 1989 merger between Federal Express and Flying Tigers, the Memphis

International Airport now serves as global hub for all types of cargo shipments. The new, international Federal Express Corporation offers comprehensive cargo coverage to all parts of the world. Bolstered by Flying Tiger's existing networks and equipment, Federal Express is now indisputably a world leader in priority cargo shipments.

Over 44 companies in the Memphis area handle all types of air freight shipments. In addition to Federal Express, a number of other companies offer exclusive air freight shipments from the Memphis International Airport. They include Airborne Express; American Airlines; Delta; DHL Airways; Emery Worldwide; Northwest; United and US Air. Additionally, several companies provide international as well as domestic air service. These include Burlington Air Express; Zantop International; LEP Profit Freight Systems and Kuehne & Nagel. During the Desert Shield contingency for example, DDMT effected a direct air freight shipment using Burlington Air Express to Saudi Arabia.

In the small parcel arena, United Parcel Service has doubled the size of its operation in Memphis and Roadway Package Express maintains a major hub locally.

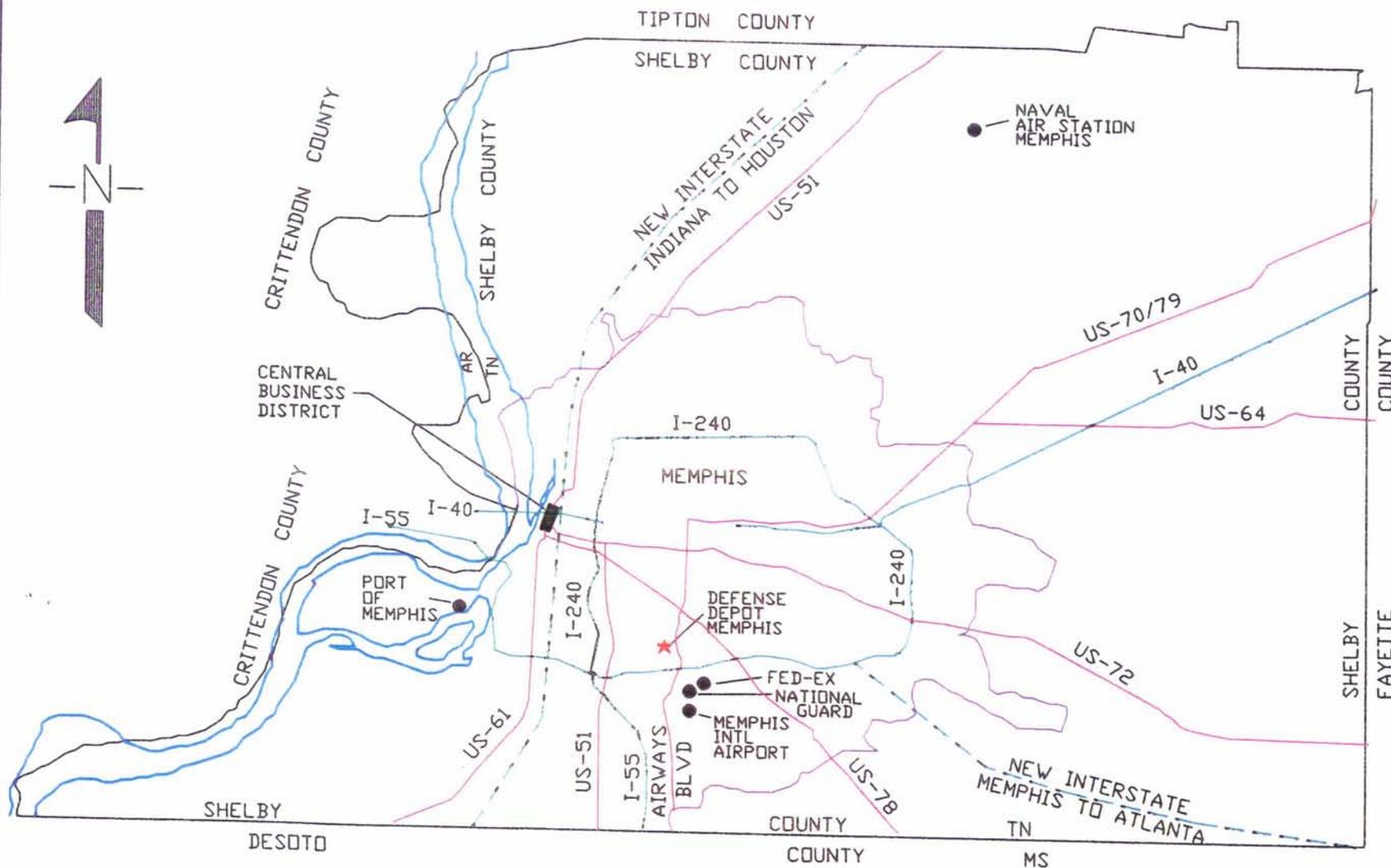
In the event of a contingency, Memphis International Airport is not the only air transportation option in the Memphis area. Six other airports, as well as the Naval Air Station offer aviation services in the immediate vicinity.

Memphis is the hub of a large network of major highways, including eight federal highways, two interstate highways and seven state highways.

Additionally, there are two highway bridges spanning the Mississippi River at Memphis, as well as an expressway which circles the city, allowing shippers to bypass inner-city traffic routes.

Memphis Defense Depot, by virtue of its geographic location, is an economic distribution center in peacetime, and is essential to supply our troops quickly in war or contingency.

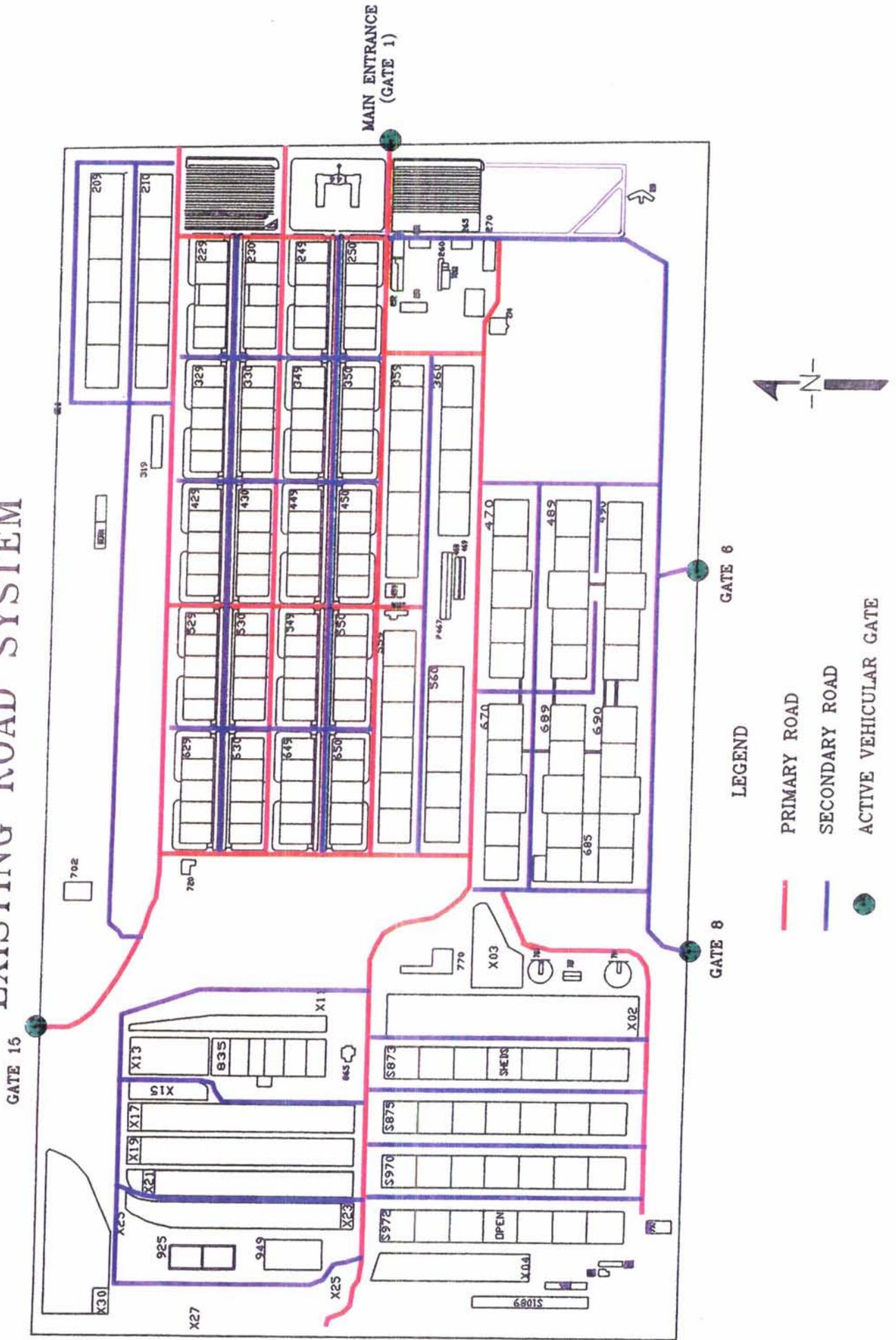
# DDMT TRANSPORTATION NETWORK



- 200 TRUCKLINES
- 44 AIR CARRIERS
- 9 AIR LINES

- 6 ALTERNATE AIRPORTS
- 2 MILITARY AIR TERMINALS: C-5, C-141, C-130
- 6 MAJOR RAIL SYSTEMS, 96 TRAINS IN/OUT PER DAY
- 6 COMMERCIAL BARGE LINES, 25,000 MILES INLAND WATERWAYS

# EXISTING ROAD SYSTEM



# **Material Handling Capabilities**

---

- **Mechanized Receiving Complex (Bldg 490)**
- **Mechanized Bulk Receiving Complex (Bldg 629)**
  - **New \$4M complex**
- **Mechanized Storage Complex**
  - **Six 200K Sq. Ft. Warehouses**
  - **Connected By Overhead Conveyors**
  - **High Rise Storage**
- **Central Pack (Bldg 689)**
  - **Binnable Items**
  - **Less Than Truckload (LTL)**
- **Automated Transportation System (Bldg 685)**
  - **Mechanized Sortation**
  - **Mobile Communication**

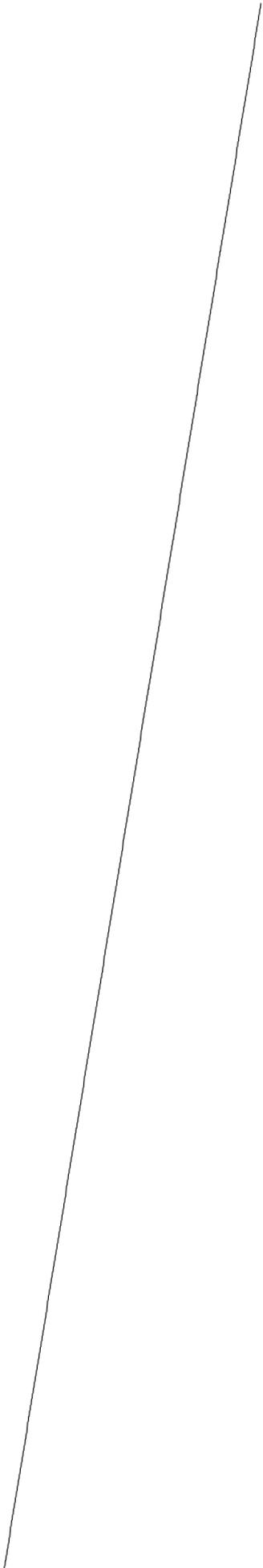
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# **Material Handling Capabilities**

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- **Hazardous Processing (Bldg 835)**
  - Hazardous Warehouse
  - Hazardous Recoup Facility
  - Spill Team
- **Special Purpose Warehouse (Bldg 560)**
  - Temperature Controlled
  - Pilferable, Sensitive Items
- **Mechanized Medical Facility (Bldg 359)**
  - Chill (Temperature Controlled)
  - Drug Vault

## MATERIEL HANDLING SYSTEMS:

### The Integrated Bin Complex

Narrow-Aisle, High-Rise Rail-Guided Storage and Retrieval System: Bin Complex W470, Secs 1-5; W670, Secs 1-3; W489, Secs 1-5, W689, Sec 1; W490 Secs 1-2; W690 Sec 1. The Bin Complex Storage and Retrieval System is a combination of twenty foot bin and package rack with eight sections of sixteen foot pallet rack for stock replenishment. Rail-guided stock selectors and turret trucks are used for stow and pick. An in-line towveyor and cart system, 4400 LF, connects Central Receiving, W490, Secs 1-2, and the Storage and Retrieval System for stowing new receipts and stock replenishment.

Receiving Operations: Truck traffic enters the Defense Distribution Depot through Gate 8. Truck Conveyance Control then routes the incoming receipts to Central Receiving, Bin Complex; Bulk Receiving, Bulk Complex; or directly to the receiving warehouse for full truck loads.

Central Receiving, W490, Secs 1-3. The Central Receiving System for the Bin Complex is composed of two tilt tray sorters, one carousel type with six induction stations, and one over and under type with one induction station. Receipts are offloaded via three telescoping traversing conveyors. There are a total of 30 inspection and processing lines and six triwall return work stations. Fifteen

weighing and cubing units are integral to the receiving process. The conveyor system consists of powered accumulation and non-accumulation live roller as well as gravity. A trash take-away conveyor is located in section 1. The over and under sorter feeds thirty-eight chutes designated for various storage locations in the Bin Complex. This sorter interfaces with the in-line towveyor and cart system which links the Bin Complex for stowing receipts.

Central Pack, W689, Secs 2-4. The Central Packing System consolidates the packing function for the Integrated Bin Complex. The six warehouses in the Bin Complex are connected via 4500 LF of elevated, overhead conveyor and crossovers to the materiel induction mezzanine in section 2. Bin materiel is processed through one of 105 chutes as single lines, multi-line consolidation, or triwall consolidation. Dedicated truck consolidation chutes (6) are located in section 3. Completed bin pack containers are processed through three Automated Weighing and Offer (AWOS) stations for selection of transportation mode and sorted to the outbound lanes based on that mode. The Less-Than-Truckload (LTL) pallet conveyor system in section 3 is a one of a kind DLA packing facility. LTL pallets depot-wide conveyed by transporter trucks are inducted in section 4. Pallets, three thousand pounds max, in multi-line/single pallet or single line/multi-pallet configuration can be processed through one of 33 work stations. Small parcel shipments (9 lanes) are outloaded in section 2 with freight shipments connected to the Automated Transportation Terminal via overhead conveyor with pallet loads via an in-line towveyor system.

## Transportation Terminal

The Automated Transportation System (ATS), Transportation Terminal Complex, W689 and W690, Secs 4,5 and W685, Sorter. The automated materiel handling system for the ATS consists of 6,000 LF of conveyor. Materiel is inducted into the system in full pallet loads with depalletization capability at three work stations, loose container, via overhead conveyor or in-line towveyor. There are ten induction points, a 78 lane sorter, 14 outbound pallet lines with 280 pallet accumulation zones, 9 carton delivery and staging lines, a 1700 LF in-line towveyor system with 7 load/unload stations, and 33 work stations. The physical facility is configured to allow entry and exit points via 57 truck doors on three sides as well as transporter truck access, three finger docks, three ramps and overhead conveyor and towveyor entry from Central Pack. Rail access is also available at the ATS with 10 acres of adjacent hardstand for truck spotting with other open areas diverted as needed. A "hot house" for processing hazardous materiel is integral to the facility. The ATS is a multi-functional complex. It not only serves as the depot freight consolidation and shipping complex, but it also has the capability for crossdocking, processing direct vendor deliveries, transshipments, and can function as a containerization point with intermodal access via the Memphis transportation network.

Carousel Storage and Retrieval System, W690, Sec 2. Forty carousels comprise the storage and retrieval system with 20 floor level and 20 mezzanined. The seven foot high carousels are 50 feet long with 50 carriers each. One workstation exists for each



two carousels with a microcomputer at the pick end. The microcomputer is capable of receiving up to 100 retrieval commands with automatic selection of the most efficient route for queue retrievals.

Quick-Pick Flow Rack System, W690, Sec 2, and W670, Sec 4. High demand clothing and footwear are located in the flow rack system. The units are eight foot overall height with four levels to maintain access for pick and replenishment.

## Bulk Complex

Mechanized Bulk Receiving, W629, Secs 3-5. The development of the Bulk Receiving Complex was a joint effort to convert this World War II building into a receiving facility and install an automated material handling system for processing bulk, pallet loads. The facility includes 17 dock doors, a flatbed loading dock, and a firewall door expansion for pipe processing and two ramps for tug access. The automated system spans three sections with inprocessing via a 33 lane sorter or 18 pallet accumulation conveyor lines. Single pallets with multiple NSNs are processed through the sorter, consolidated, and repalletized for outloading. Six triwall work stations are collocated with the sorter to utilize the pallet transfer car. The system includes 38 work stations. Medical receipts are processed through a temperature controlled building in section 3. Following receipt and inspection on the sorter platform or the conveyor lane work stations, pallets are moved via takeaway conveyor to outloading in section 3. Three roll-on/roll-off conveyors interface with the depot-wide transporter truck system for conveyance to the bulk warehouses or the shed complex.

Bulk Pack, W549, Sec 3. The Bulk Packing System consists of two elevated conveyor systems and work station platforms to receive, pack and ship full pallet loads. The system includes two mobile dock conveyors that interface with the intradepot transporter trucks and the two elevated conveyor systems. The conveyor system utilizes zero pressure accumulation conveyor, two stretchwrappers and scales with powered roller conveyor, and take-away powered roller conveyor.

Hazardous Materials Warehouse High-Rise Rack and Packing System, W835, Secs 1-6. The hazardous system receives, stores, and ships poisons, toxins, low hazardous, corrosives, flammables and oxidizers. The six hazardous commodities are stored in designated building sections in a high-rise, narrow aisle, rail-guided pallet rack system with an in-rack sprinkler system. Stack height is 25' top of load with varying five or six elevations. EE rated vehicles include man-up turret trucks and stock selectors with storage/receipt modules for stow and pick and fork-lifts for receiving and shipping. The packing system is located in section 4. Hazardous commodities require separate packing stations. Packing areas include small parcel/freight package pack and pallet floor pack. The system includes two parallel automated stretchwrap conveyor lines. Two roll-on/roll-off conveyors are included for intra-depot shipments. Hazardous certifier packing stations are also included. The building includes 13 truck dock doors and 11 rail dock doors as well one flatbed loading dock.

General Purpose Warehouse 560. This building is the DLA prototype for general purpose warehouse construction. Two sections are temperature controlled with three sections for J-Coded Security items. The high-rise rack system is dual rail-guided for packages and pallets. Vehicles include fork-lifts, stock selectors, and man-up turret trucks. This is a secure warehouse therefore a packing system is located in section 3. There are six pack stations with powered, roller conveyor. An automated stretchwrapper interfaces with a 10 pallet position accumulation conveyor system

that feeds a mobile dock conveyor. The mobile conveyor system interfaces with the intradepot transporter truck system. The building has six truck docks in section 3 and one each angle dock and rail dock per rack section.

General Purpose Warehouse 360. GPW 360 is currently under construction with a military construction completion date of Dec 95 with the rack and pack systems schedule for FY 97. This building is a footprint of GPW 560 except for the truck dock door configuration. The pallet rack system will be dual rail-guided, high-rise storage and retrieval system in sections 1, 2, 3 and 5. The packing system in section 3 will include a stretchwrapper and roll-on/roll-off for intradepot truck access. Four work stations with powered conveyor will be provided for loose issue clothing.

Roll-on/Roll-off Transporter Docks. Sixteen powered transporter docks to include stationary and mobile types have been procured through a DLA Central Buy. These will replace gravity transporter dock stations as well as supplement new locations depot-wide. The first phase delivery was due 16 Feb 95.

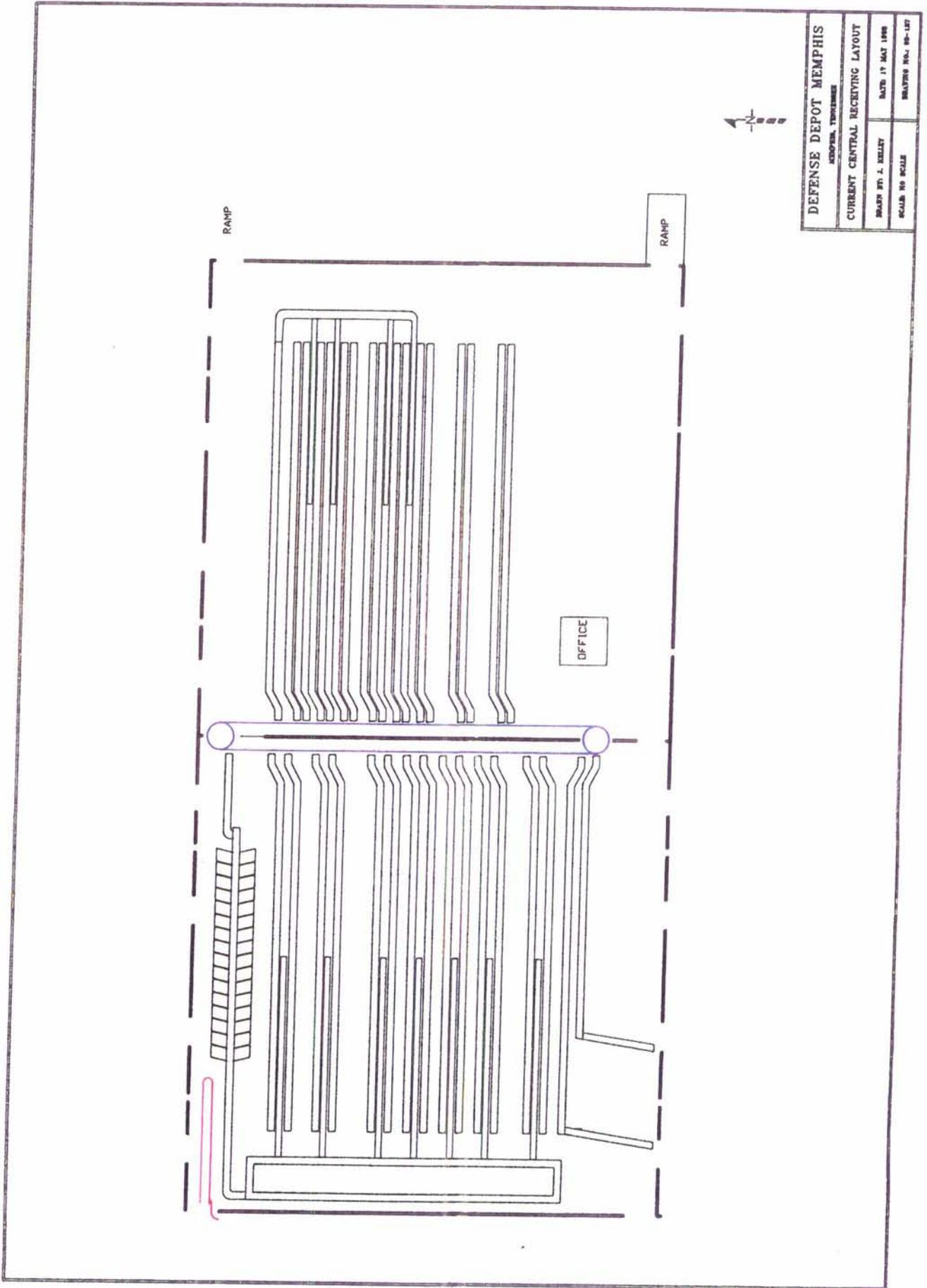
Glass Storage and Pack System, W972 Sec 4. Special storage aids and a monorail system consisting of an electric hoist with vacuum suction cups aids in the safe and efficient handling of glass in this specialized pack area.

Aluminum/Steel Sheet Handling and Pack System, W972, Sec 5. This overhead monorail system with vacuum suction cups was installed to assist in the safe and efficient handling and packing of sheet aluminum and steel.

Medical Storage and Packing System, W359, Sec 2. The medical complex in building 359 is a temperature controlled secure facility with several unique storage areas - chilled storage, vault and wire cage. The packing is designed to convey material from loose issue medical storage to sortation and final packing and return empty tote pans to the warehouse storage area. The 600 LF roller accumulation conveyor runs from section 5 to section 2 for package induction to the forty-four lane mechanical sorter. Powered roller conveyor is provided to move material to final packing lines and outbound transportation. Bulk item pack and staging area is also available in section 2.

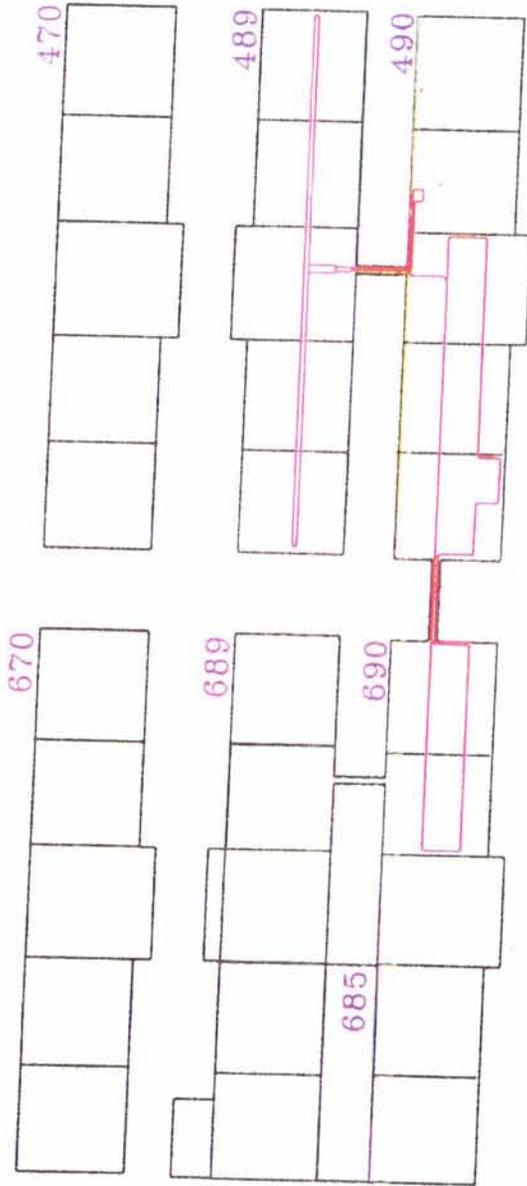


DEFENSE DISTRIBUTION  
 REGION CENTRAL  
 MEMPHIS, TENNESSEE  
 BIN COMPLEX  
 (PROPOSED LAYOUT)  
 DRAWN BY: J. KELLEY  
 DATE: 01. 0. 68



DEFENSE DEPOT MEMPHIS	
MEMPHIS, TENNESSEE	
CURRENT CENTRAL RECEIVING LAYOUT	
DESIGN BY: J. KELLY	DATE: 17 MAY 1968
SCALE: 1/8" = 1'-0"	DRAWING NO.: 10-127

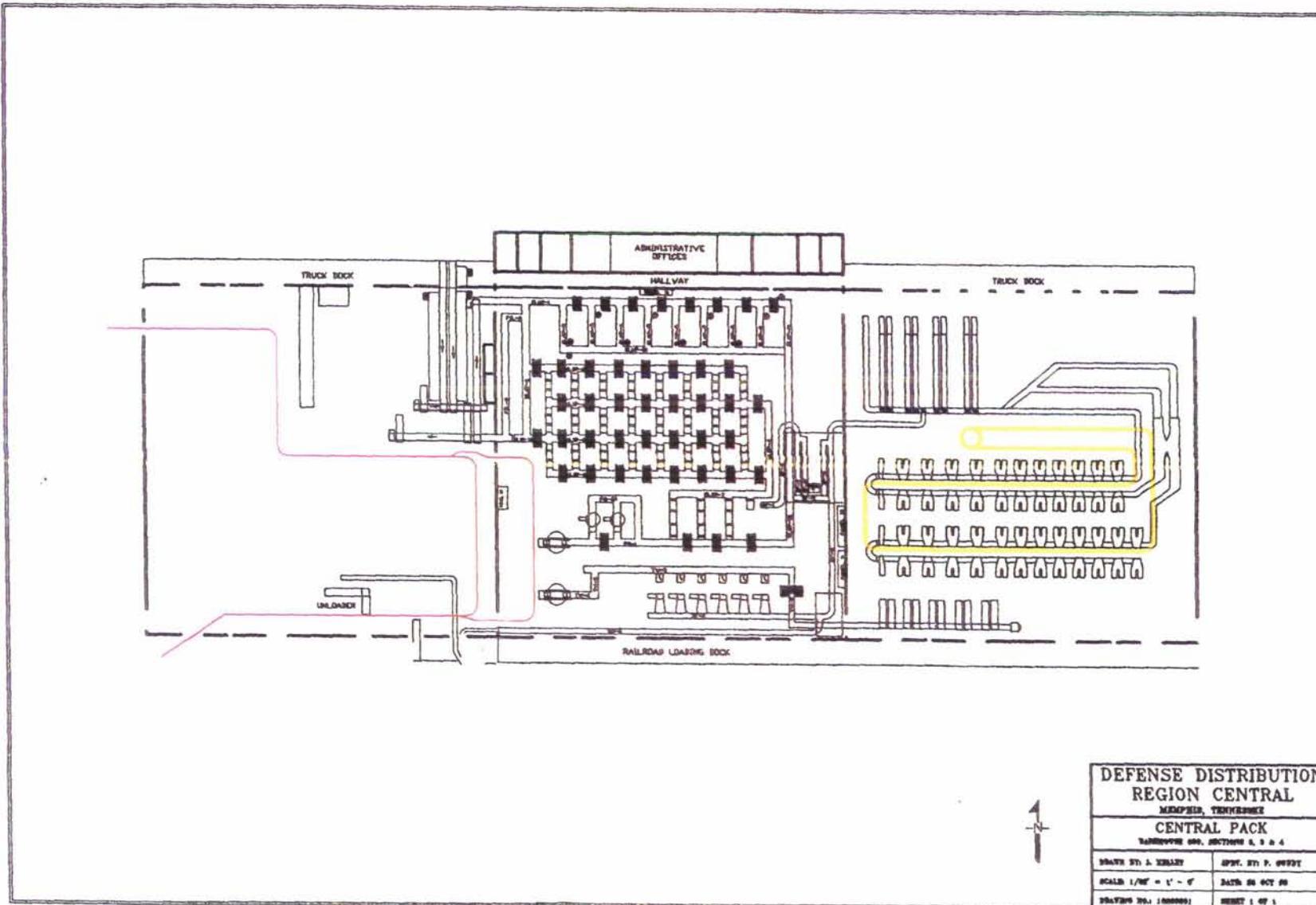
# TOWLINE ROUTE



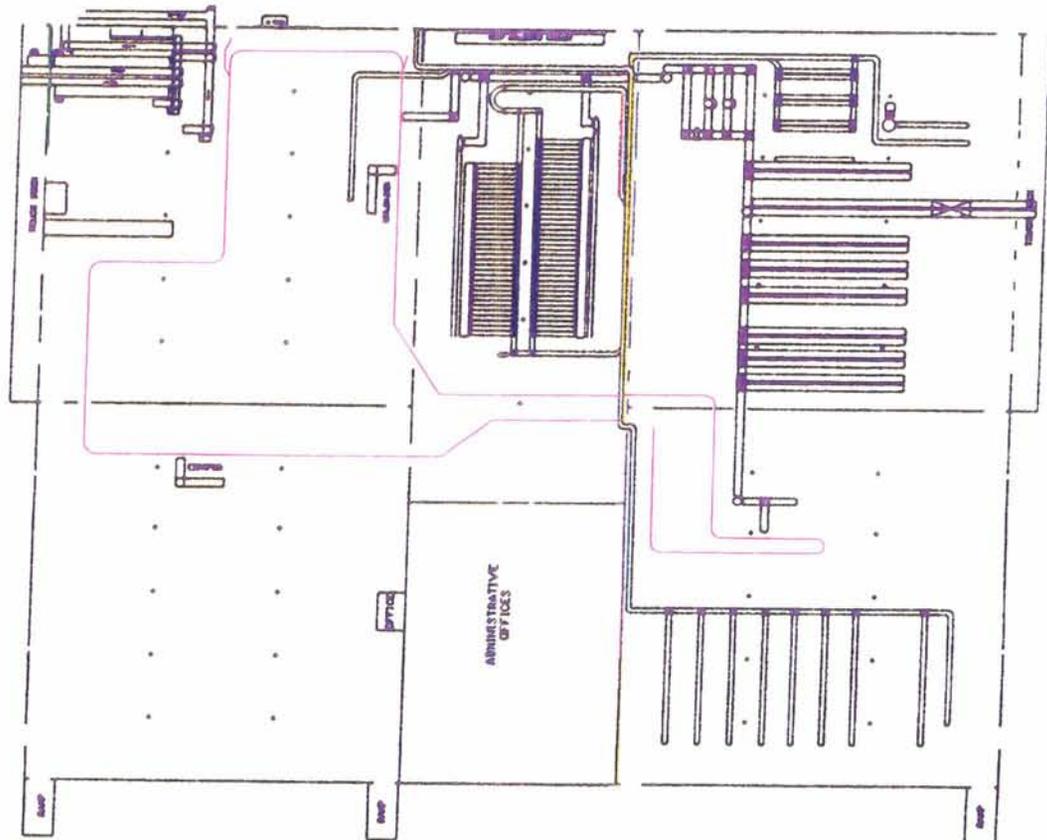
— TOWLINE



DEFENSE DISTRIBUTION REGION CENTRAL MEMPHIS, TENNESSEE	
TOWLINE ROUTE	
DRAWN BY: J. KELLEY	DATE: 6 JANUARY 1968

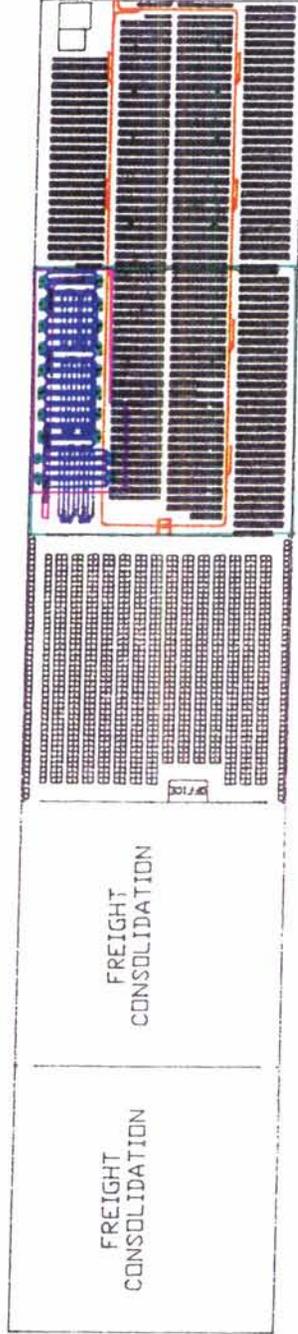


DEFENSE DISTRIBUTION  
REGION CENTRAL  
MEMPHIS, TENNESSEE  
REGIONAL FREIGHT  
CONSOLIDATION CENTER  
DRAWN BY: J. KELLEY  
CHECKED BY: P. GIBBY





690



SEC. 5	SEC. 4	SEC. 3	SEC. 2	SEC. 1
SQ. FT. 0	SQ. FT. 0	SQ. FT. 21000	SQ. FT. 19568	SQ. FT. 18378
CU. FT. 0	CU. FT. 0	CU. FT. 294000	CU. FT. 273952	CU. FT. 257292

SQ. FT. 18378  
CU. FT. 257292

SQ. FT. 19568  
CU. FT. 273952

SQ. FT. 21000  
CU. FT. 294000

SQ. FT. 0  
CU. FT. 0

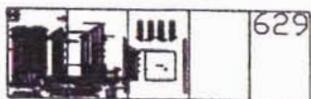
SQ. FT. 0  
CU. FT. 0

DEFENSE DEPOT MEMPHIS  
MEMPHIS, TENNESSEE

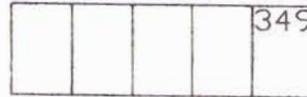
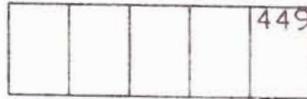
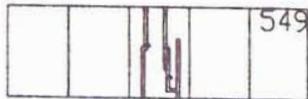
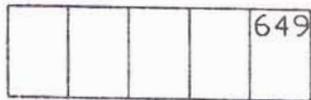
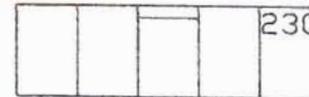
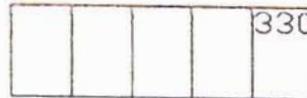
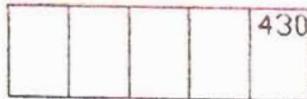
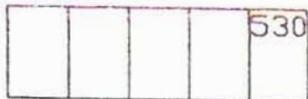
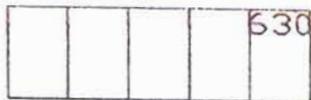
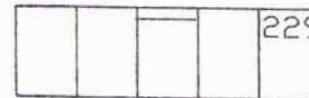
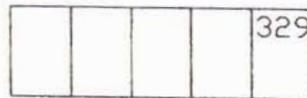
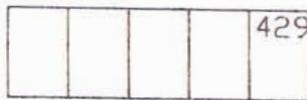
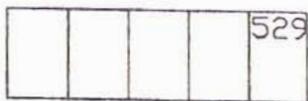
690

DATE: 6-19-1990 SCALE: 1" = 200'

DRAWN BY: J. KELLEY, TMPS



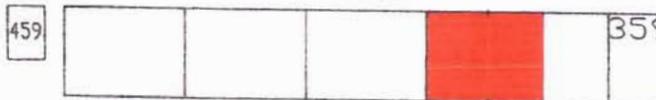
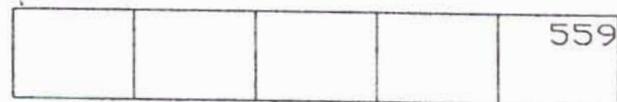
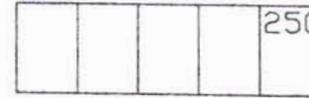
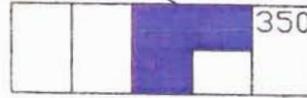
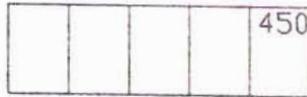
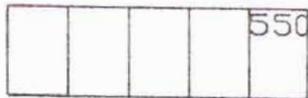
BULK RECEIVING



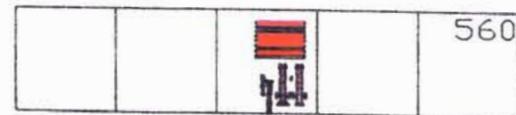
BULK PACK

SUBSTANCE PACK

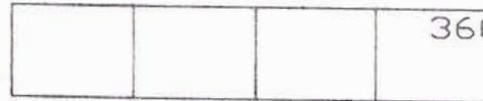
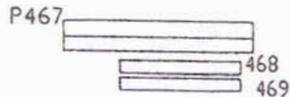
BASE SUPPLY



MEDICAL PACK



GP PACK



DEFENSE DISTRIBUTION REGION CENTRAL MEMPHIS, TENNESSEE	
DIVISION TWO (CURRENT LAYOUT)	
DRAWN BY: J. KELLEY	APPR. BY: P. GOODY
SCALE: 1/8" = 1' - 0"	DATE: 11-1-68

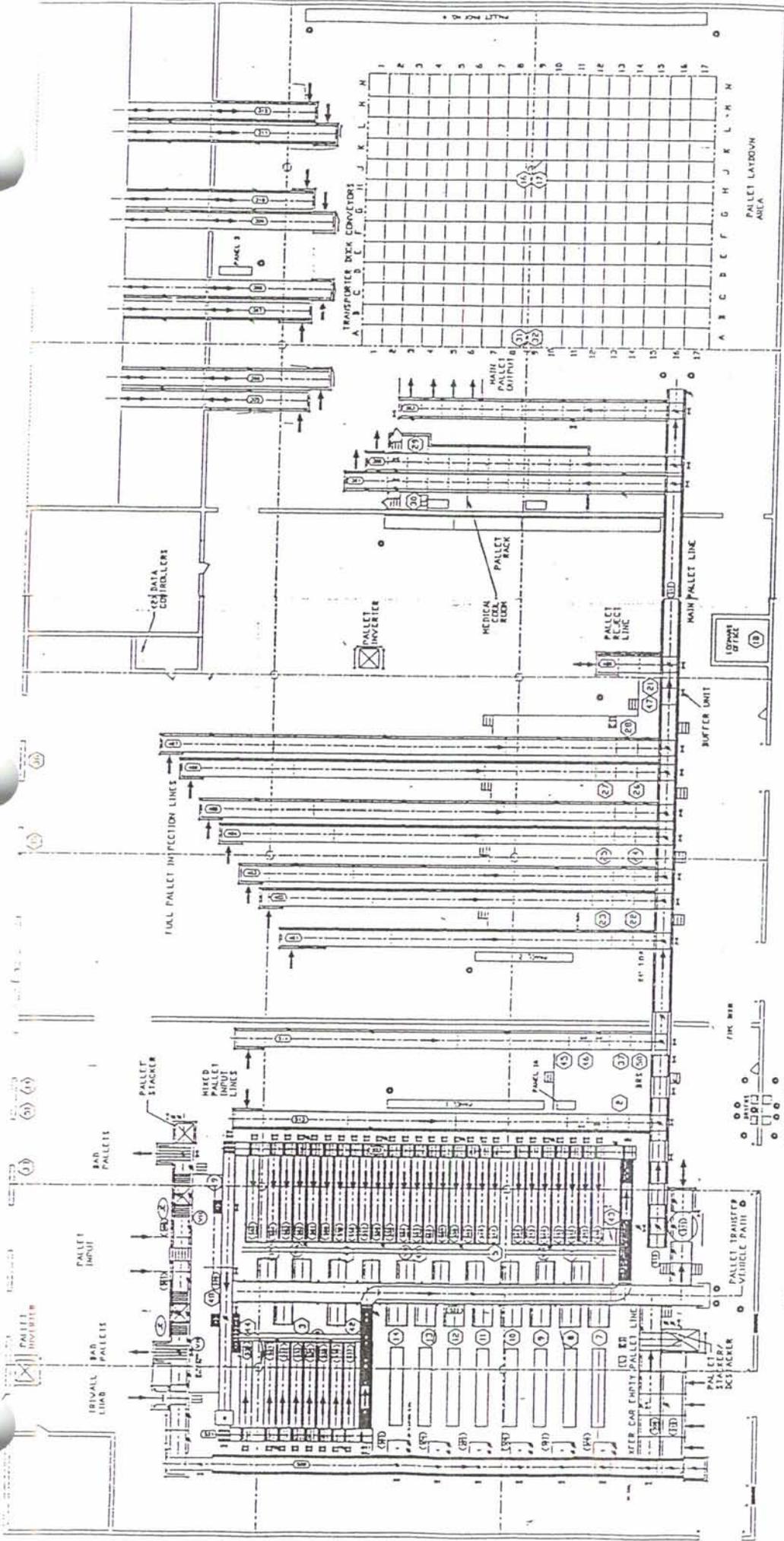
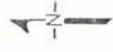


FIG. 3

FIG. 1

FIG. 5



DEFENSE DISTRIBUTION REGION CENTRAL MEMPHIS, TENNESSEE	
MECHANIZATION OF BULK RECEIVING WAREHOUSE 02P, SECTIONS 3,4,4G	
DRAWN BY: J. KELLEY    APPROVED BY: A. TAPPER	
DATE: 21 OCTOBER 1961    DRAW NO.: BRDNRG 010108	
DATE	REVISION
12/20/61	1 - SMALL RETURN
11/21/61	2 - BULK RETURN AREA
APPROVED BY:	ACT
	MAO

**WORKSTATION LEGEND**

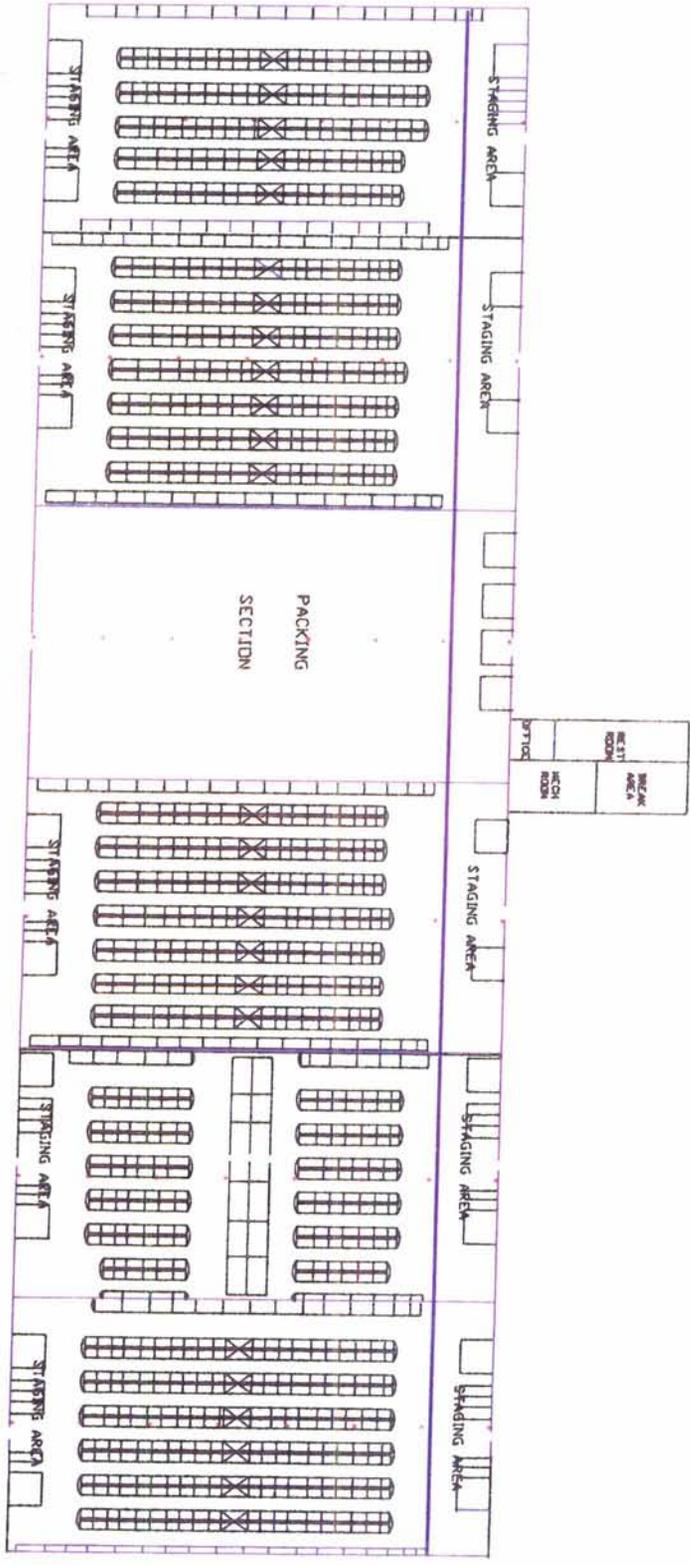
NUMBER	FUNCTION
2,37	MIXED PALLET (MIXED PARTS) SINGLE END SMALL PARCEL PALLETIZING
3,4,6	SMALL PARCEL PALLETIZING
7-14	TRIALWAL INSPECTION/PALLETIZING
16-18	FILLER STATIONS
21	INSPECTION REJECTION
22-28	FULL PALLET INSPECTION
29,30	MEDICAL INSPECTION
31-34	FILLER STATIONS
38	DISPATCH OFFICE (NOT SHOWN)
39,39A	MEZZANINE OFFICE (NOT SHOWN)
40,41	NOT USED
42,43*	SORTATION STATUS
44*	SORTATION ERROR
45,46*	BRS SUPERVISOR
47*	PALLET DISPATCH KEYPAD
48,49*	DE-PALLETIZATION (DATA INPUT/SCAN)
50*	SORTATION STATUS
51*	DOCK RECEIVING

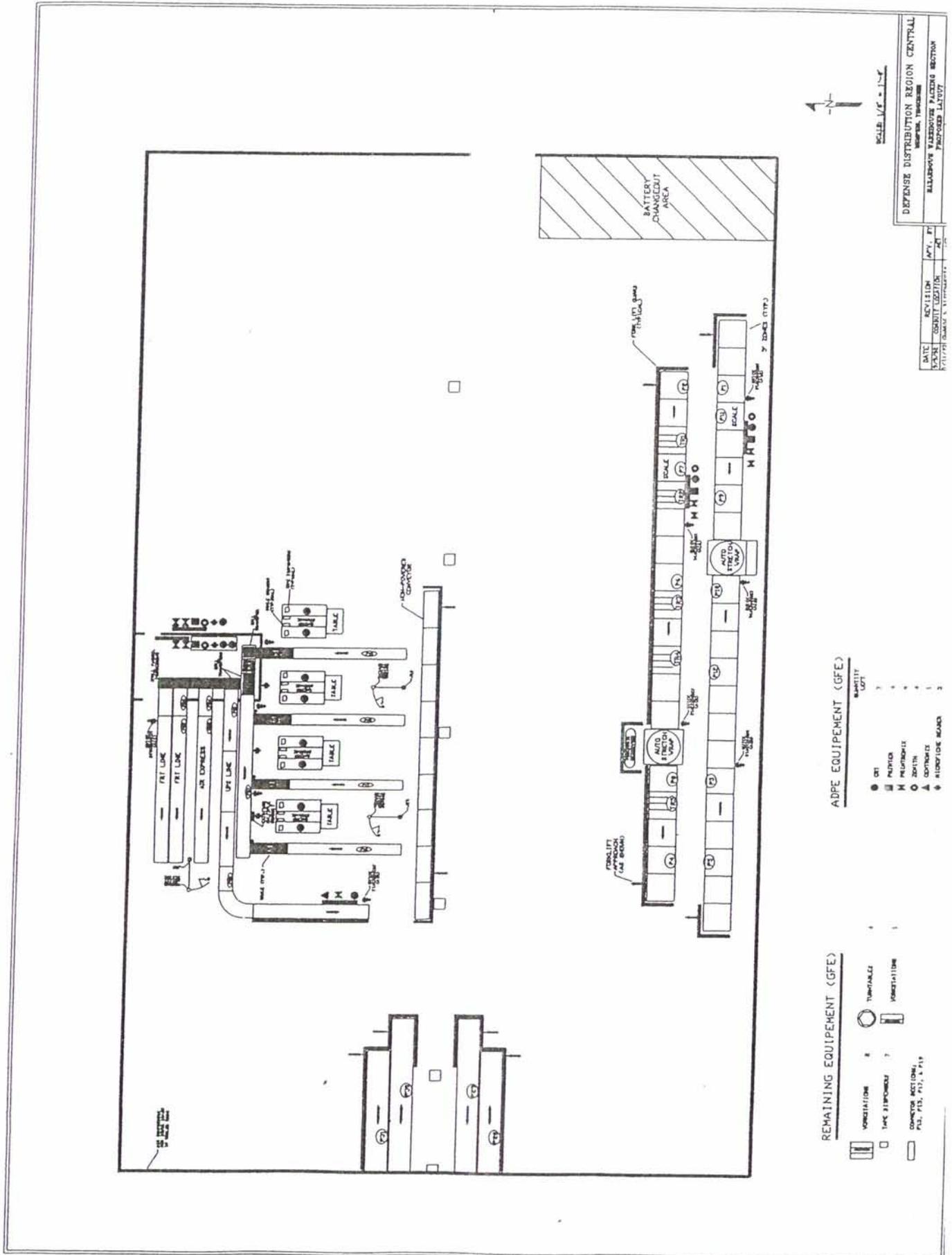
\* BRS STATIONS SUPPLIED BY HARRIS

CATWALK ON WESTSIDE OF ELEVATED PACKAGE LINE AND CROSSOVER AT NORTH END OF SORTATION PLATFORM OMITTED FOR DRAWING CLARITY.

- WORK STATION
- ⊗ MOTOR
- TO ENTER VALVE
- ⊖ OVERHEAD SCANNER
- ⊥ TILT TABLE
- - MULLBERRY (NOT TO SCALE)
- ⊖ CURT BEAM CURC WEIGHT SENSER
- ⊖ - COLLAR PROTECTOR

DEFENSE DISTRIBUTION  
 REGION CENTRAL  
 MEMPHIS, TENNESSEE  
 BUILDING 835  
 HAZARDOUS MATERIALS  
 DRAWN BY: J. KELLEY  
 DATE: 1/86  
 SCALE: 1/8" = 1' - 0"  
 APPT. BY: P. GORBY  
 DATE: 03 OCT 86





SCALE 1/8" = 1'-0"

DEFENSE DISTRIBUTION REGION CENTRAL  
 WAREHOUSE, THUNDERBOLT  
 BILKINHOFF WAREHOUSE PACKING SECTION  
 PROPOSED LAYOUT

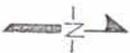
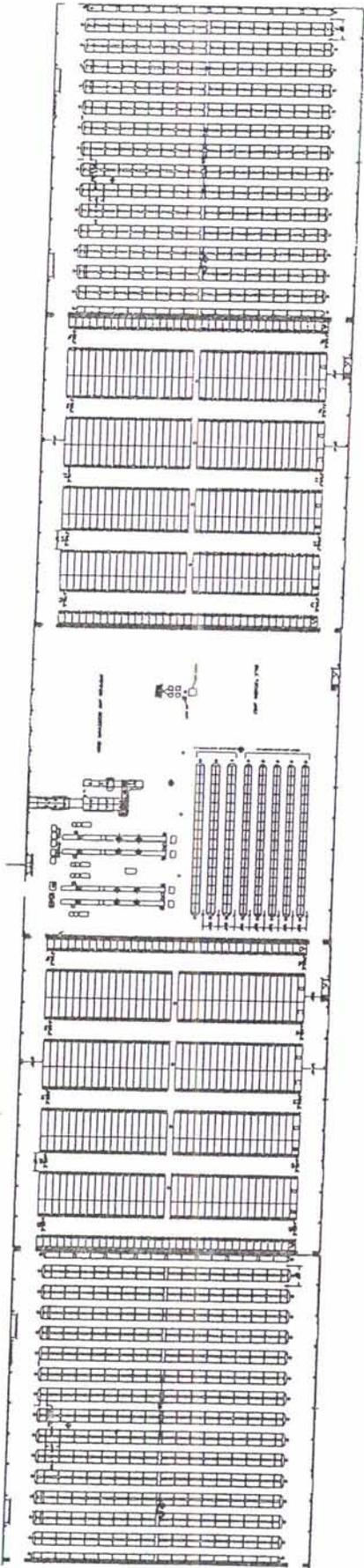
DATE	REVISION	BY
11/11/71	1	SMITH
11/11/71	2	SMITH
11/11/71	3	SMITH

ADPE EQUIPMENT (GFE)

SYMBOL	QUANTITY	LOCATION
○	7	1
□	4	2
△	4	3
◇	1	4
◇	1	5

REMAINING EQUIPMENT (GFE)

□	VENTILATION	8	TRUCKABLES	4
□	TRUCK SUPPORTS	7	VENTILATION	1
□	CONNECTOR ACTIONS, PLS, PIS, PIS, & PIS			



DEFENSE DISTRIBUTION REGION CENTRAL  
MEMPHIS TENNESSEE

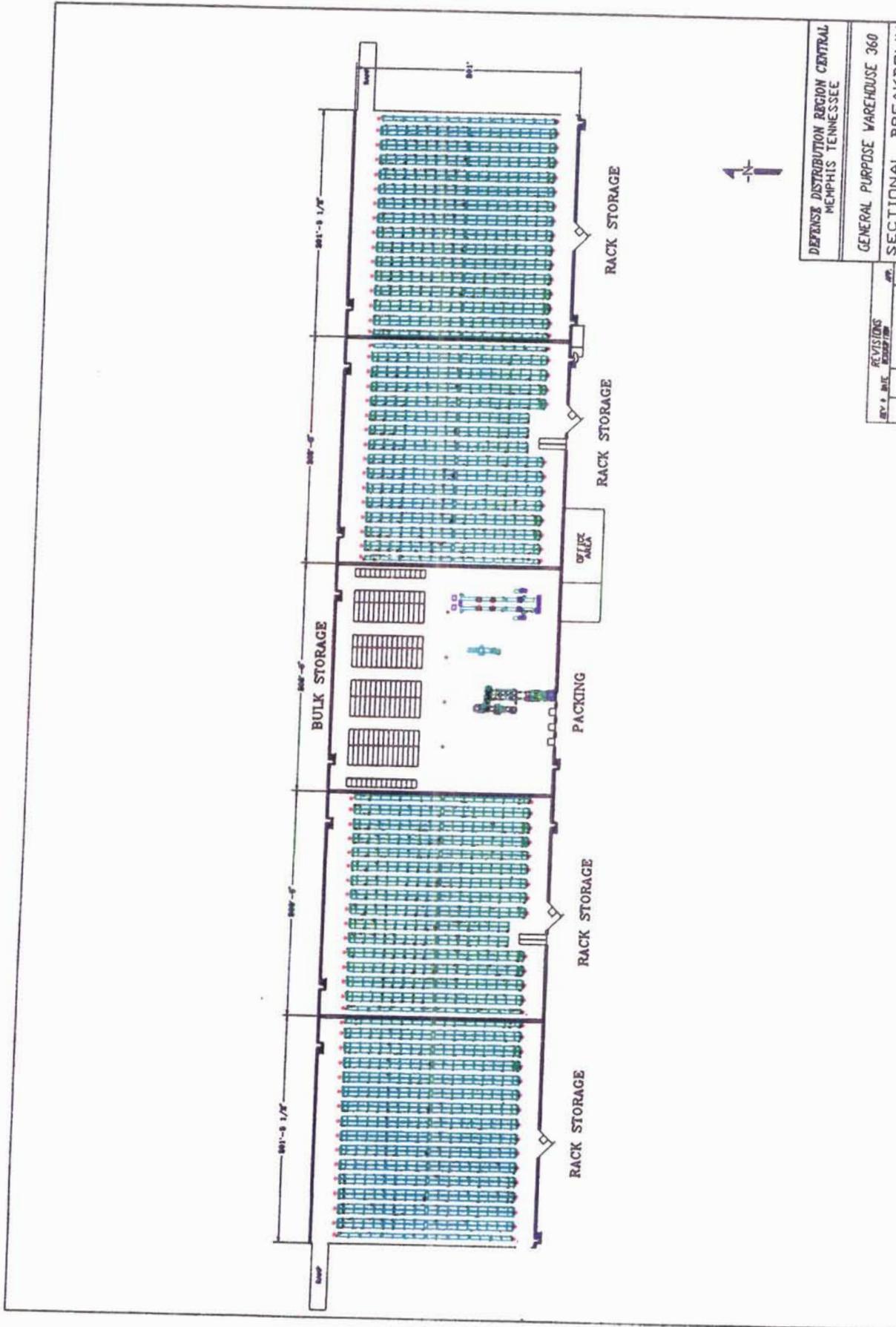
EQUIP WAREHOUSE 560

GPW 1

WHSE 560 SEC 1-5

REV #	DATE	DESCRIPTION	BY

DESIGNED BY: J. R. KELLEY  
DRAWN BY: J. R. KELLEY  
CHECKED BY: J. R. KELLEY  
DATE: 11-1-58  
SCALE: AS SHOWN  
SHEET NO. 1 OF 1



DEFENSE DISTRIBUTION REGION CENTRAL  
MEMPHIS TENNESSEE

GENERAL PURPOSE WAREHOUSE 360

SECTIONAL BREAKDOWN

DATE: 10/1/78  
BY: J. A. WILSON  
CHECKED: J. A. WILSON  
DATE: 10/1/78  
BY: J. A. WILSON

REV.	DATE	REVISIONS	DESCRIPTION



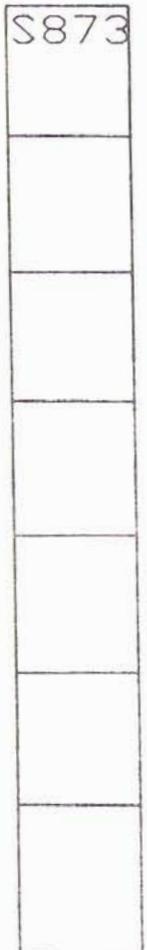
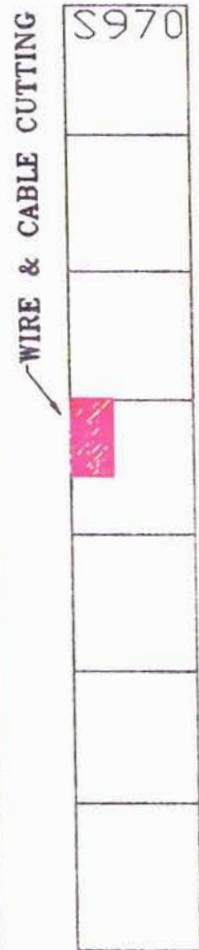
SANDBLASTING &  
PAINT SHOP

S1089

1086

1088

1087



995

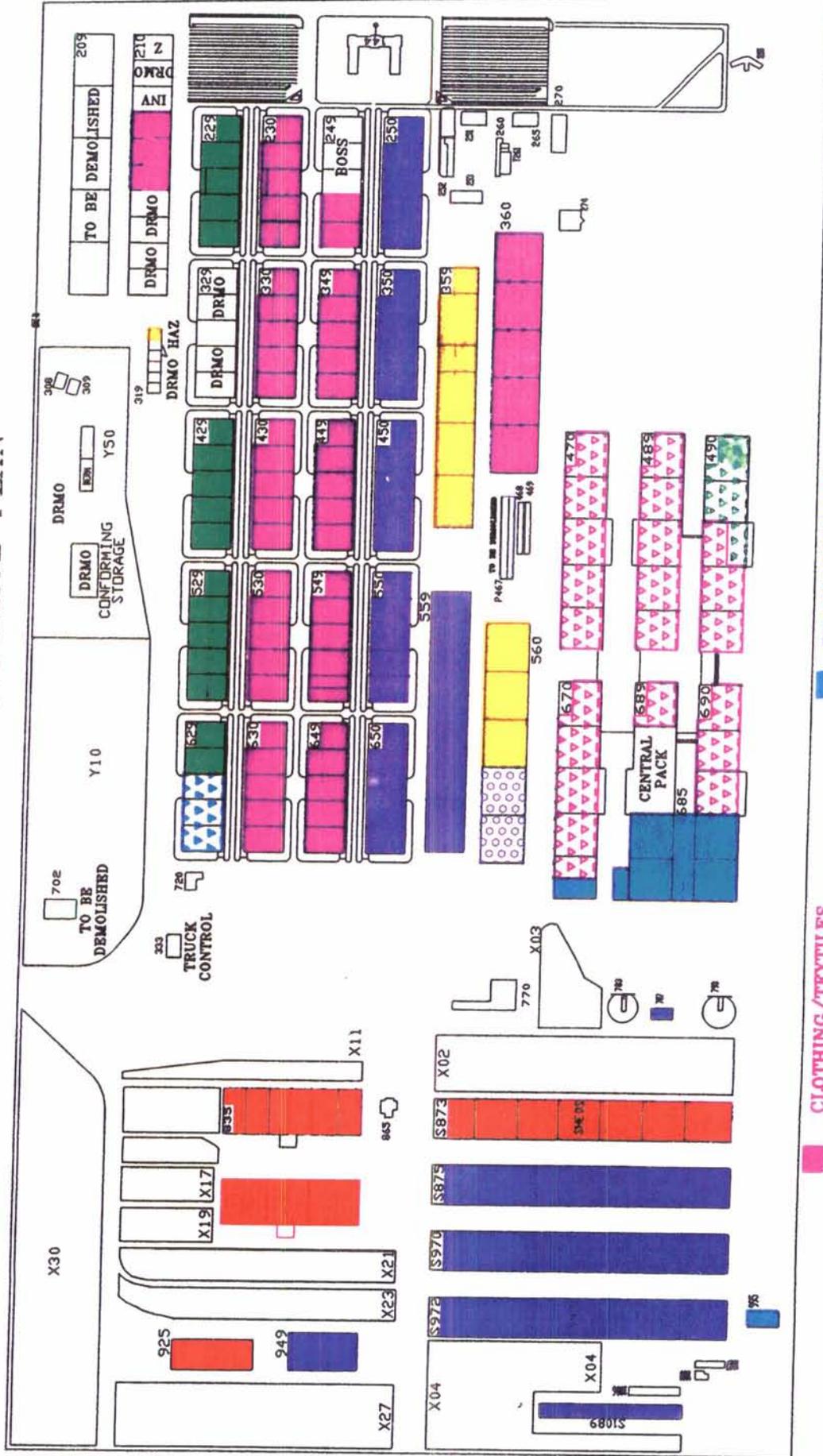


BOX SHOP,  
PACKING & CRATING

STEEL RECEIVING &  
SHIPPING BULIDING

DEFENSE DEPOT MEMPHIS	
MEMPHIS, TENNESSEE	
SHED COMPLEX	
DRAWN BY: J. KELLEY	DATE: 24 OCTOBER 1966

# 1999 PROPOSED STOCKAGE PLAN



■ CLOTHING/TEXTILES  
■ HAZARDOUS  
■ MIXED COMMODITIES  
■ SUBSTANCE  
■ PILFERABLE

■ TRANSPORTATION/RPCC  
■ CENTRAL RECEIVING  
■ BULK RECEIVING  
■ BIN COMPLEX  
■ MEDICAL



# DDMT

## AROUND THE CLOCK, AROUND THE WORLD



# **JOINT OPERATIONS**

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- **MISSION SUPPORT**
- **OPERATIONS**
- **USE OF 164TH A.G. (TN ANG)**
- **CONTINGENCY SUPPORT**

# **CONTINGENCY OPERATIONS**

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- **OPERATION DESERT SHIELD/STORM**
- **OPERATION JUST CAUSE (PANAMA)**
- **SOMALIA TROOP SUPPORT**
- **SUPPORT/UPHOLD DEMOCRACY - HAITI**
- **OPERATION SOUTHERN WATCH  
- SAUDI ARABIA**
- **OPERATION SEA SIGNAL/HAITI**



# **B-RATIONS**

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- **OPERATION DESERT SHIELD/STORM**  
**- 60 MILLION MEALS**
- **U.S. TROOP SOMALIA**  
**- 4 MILLION MEALS**
- **OPERATION SOUTHERN WATCH**  
**- SAUDI ARABIA**
- **PANAMA**
- **ACTIVE DUTY, NATIONAL GUARD,**  
**RESERVE BASES**

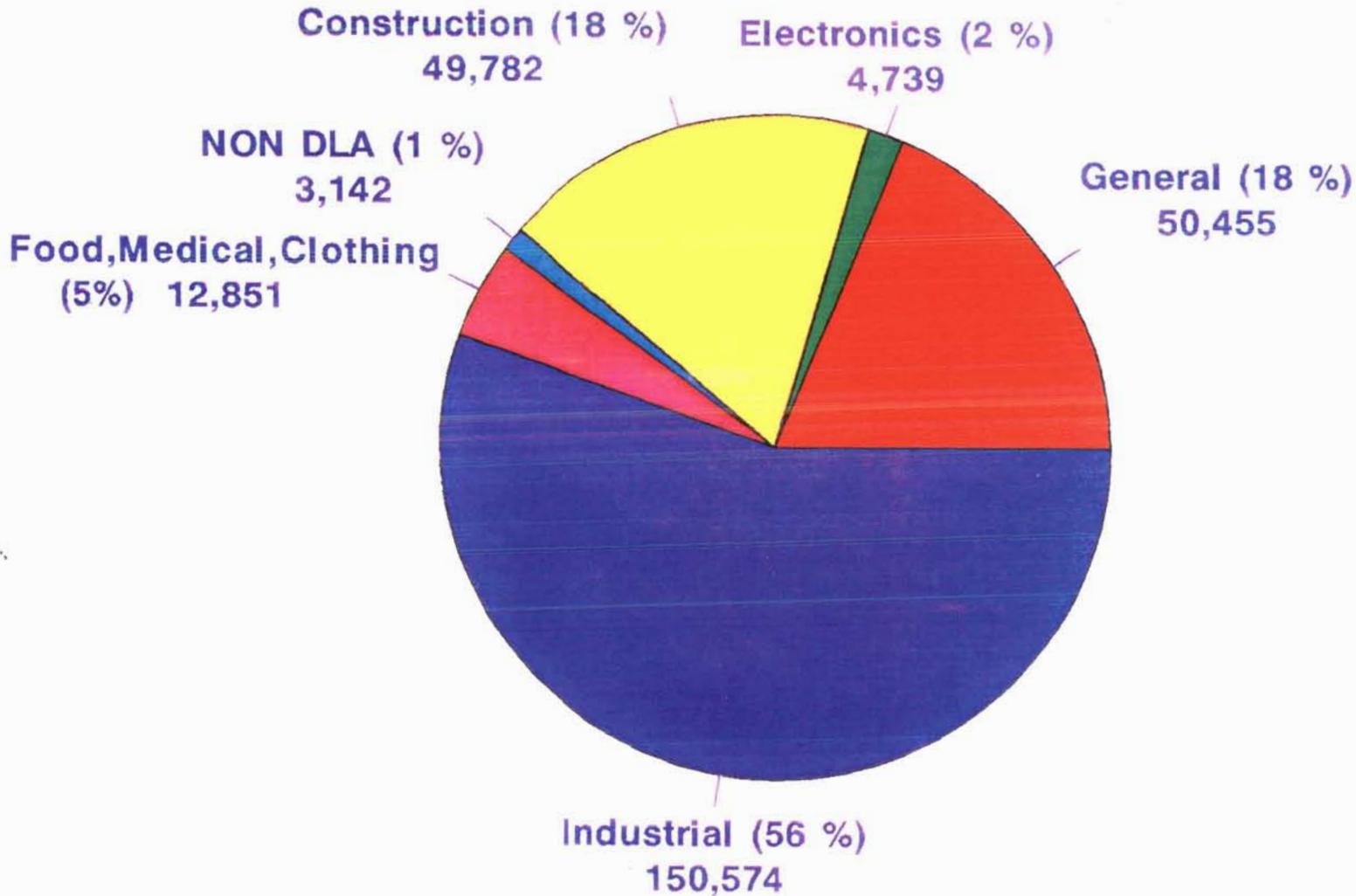
# **HUMANITARIAN SUPPORT OPERATIONS**

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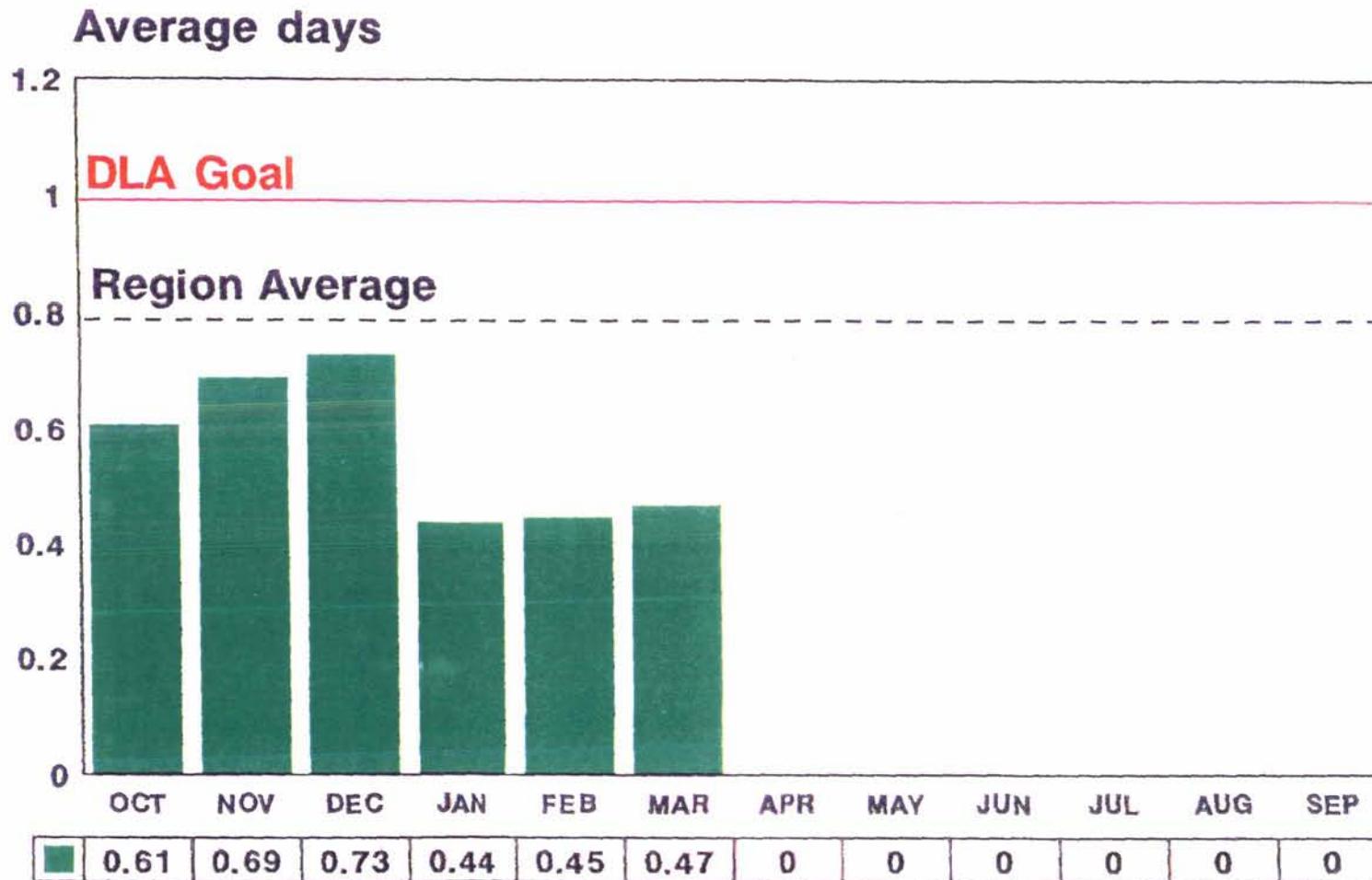
- **HURRICANE HUGO RELIEF - SOUTH CAROLINA**
- **HURRICANE ANDREW RELIEF - FLORIDA**
- **PROVIDE COMFORT - KURDISH REFUGEE SUPPORT**
- **DISTANT HAVEN - HAITIAN REFUGEE SUPPORT**
- **PROVIDE HOPE - FORMER SOVIET UNION**
- **SAFE HAVEN - CUBAN REFUGEE SUPPORT**
- **SUPPORT HOPE - RWANDAN REFUGEE SUPPORT**
- **HUMANITARIAN AID PROGRAM - NATIONAL FOOD KITCHEN SUPPORT**

# NSNs Stored

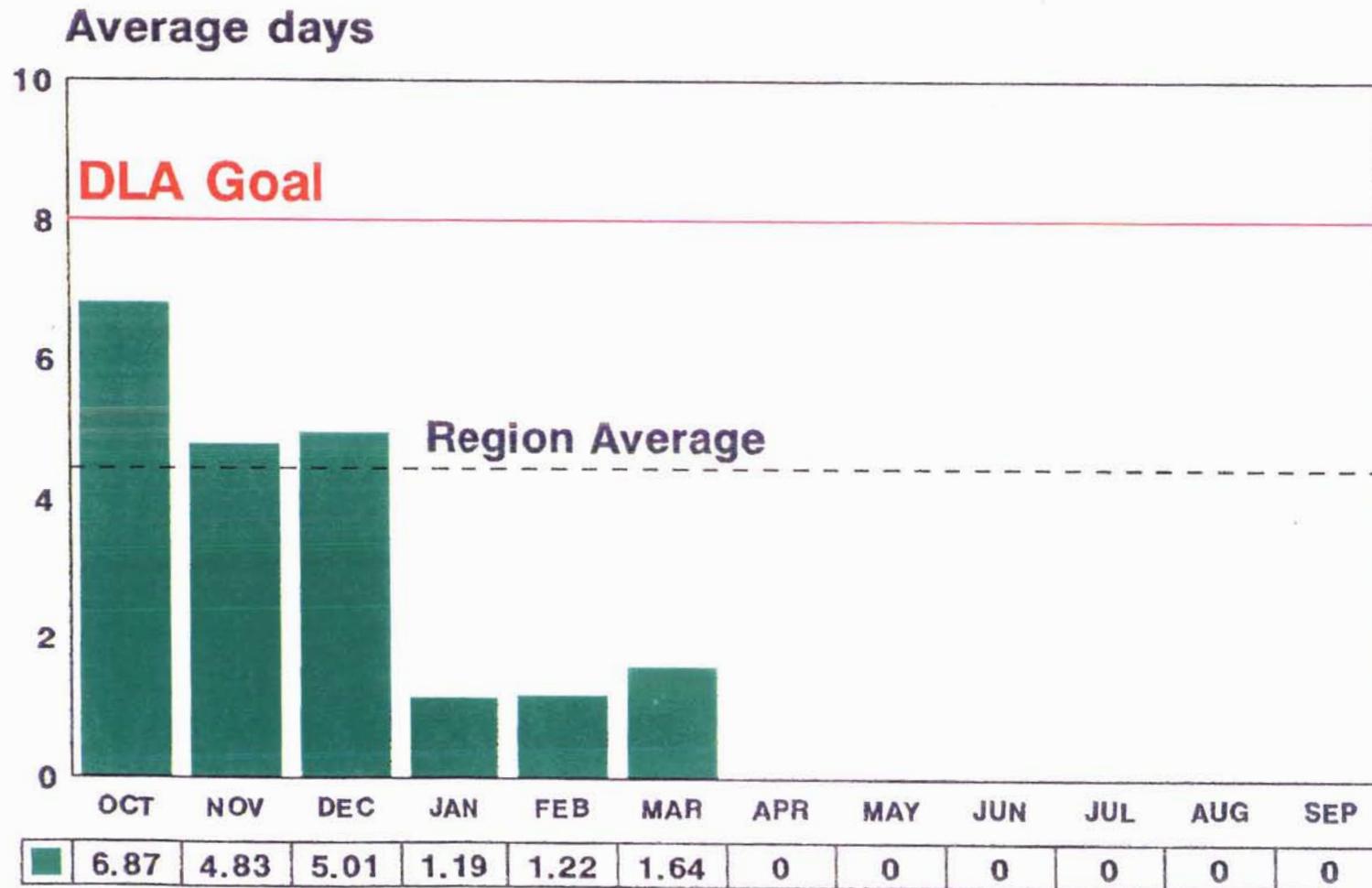
Total: 271,543



# FY95 SHIPMENTS HIGH PRIORITY

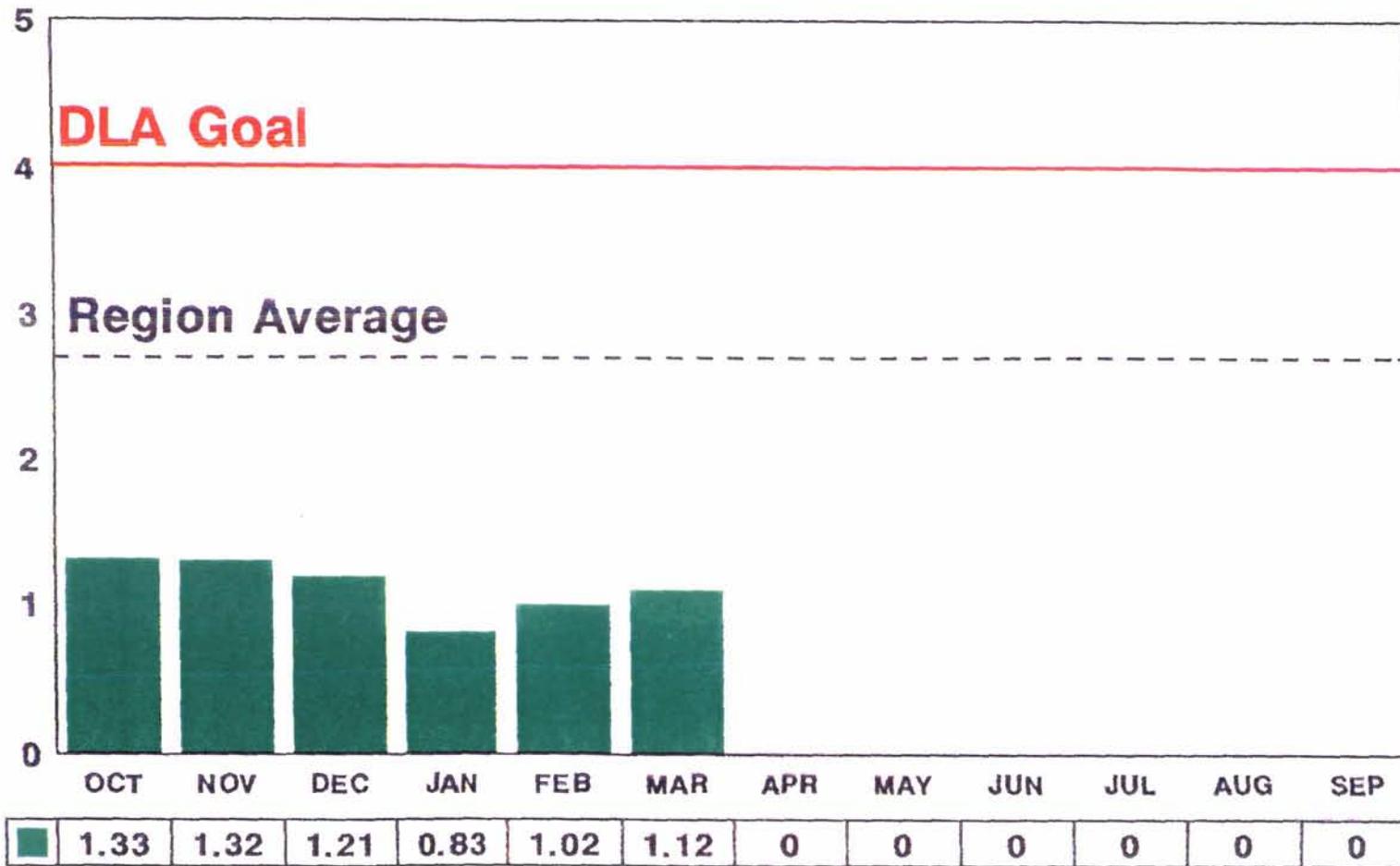


# FY95 SHIPMENTS ROUTINE



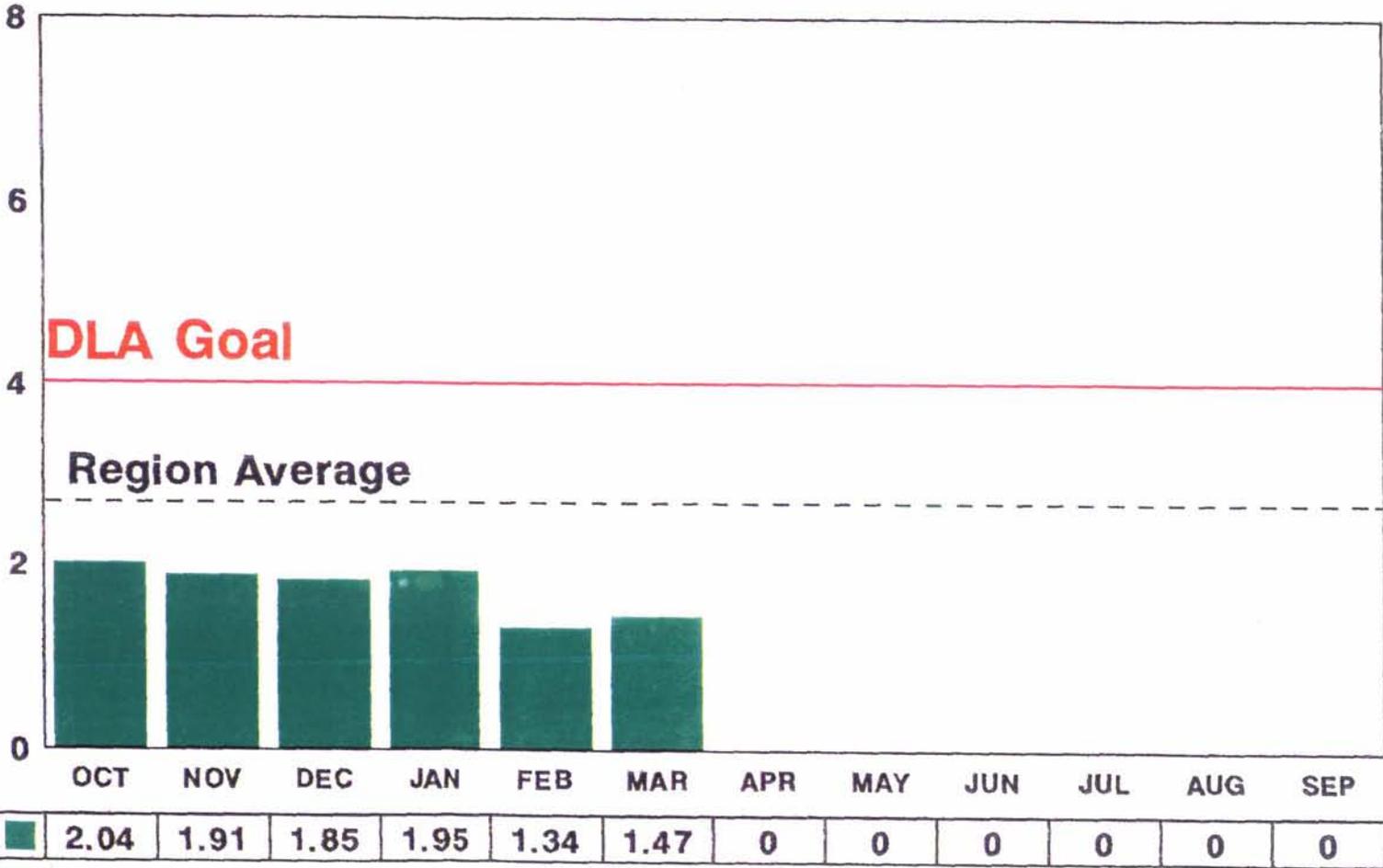
# FY95 RECEIVING NEW PROCUREMENT

Average days



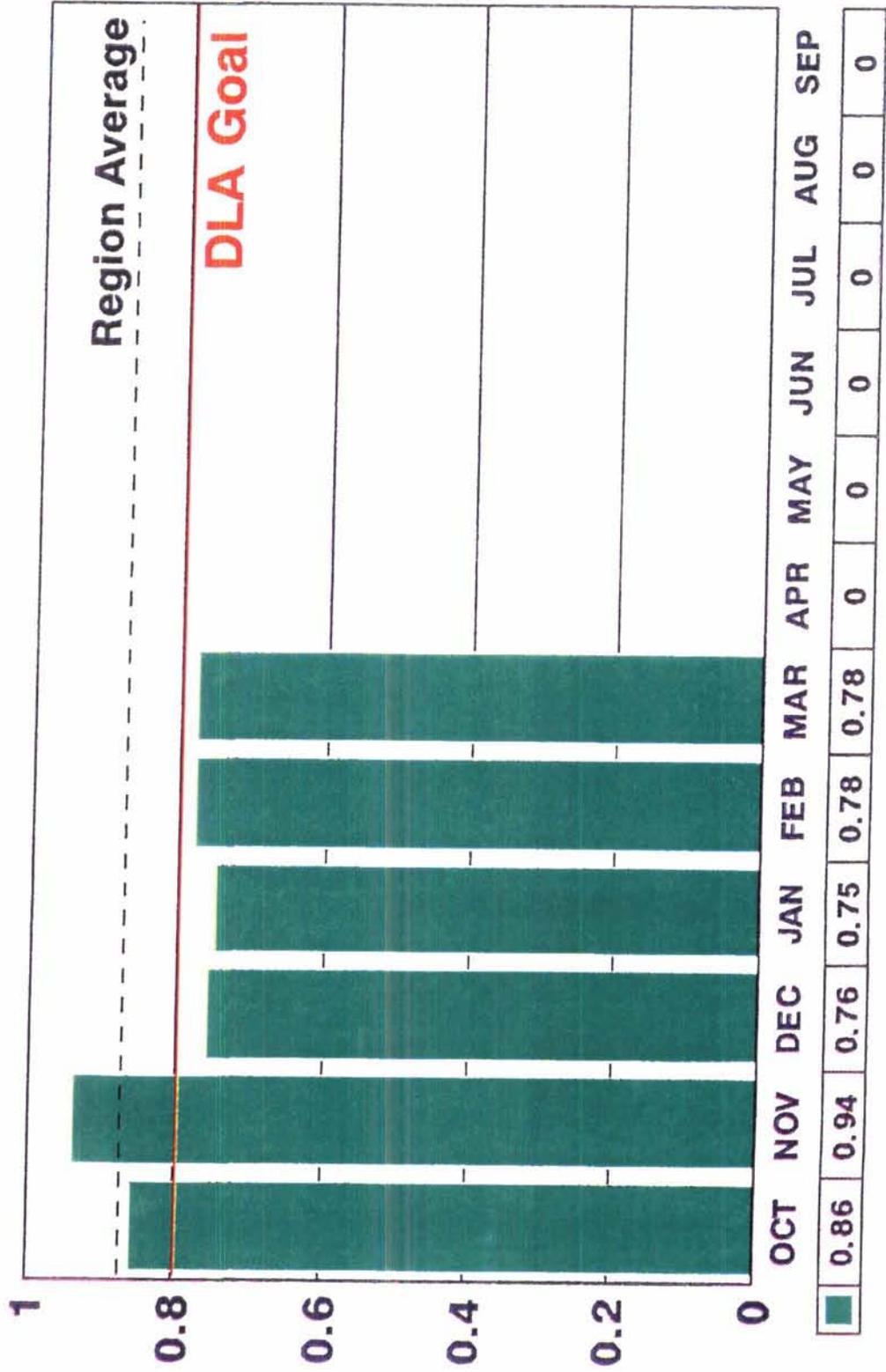
# FY95 RECEIVING CUSTOMER RETURNS

Average days



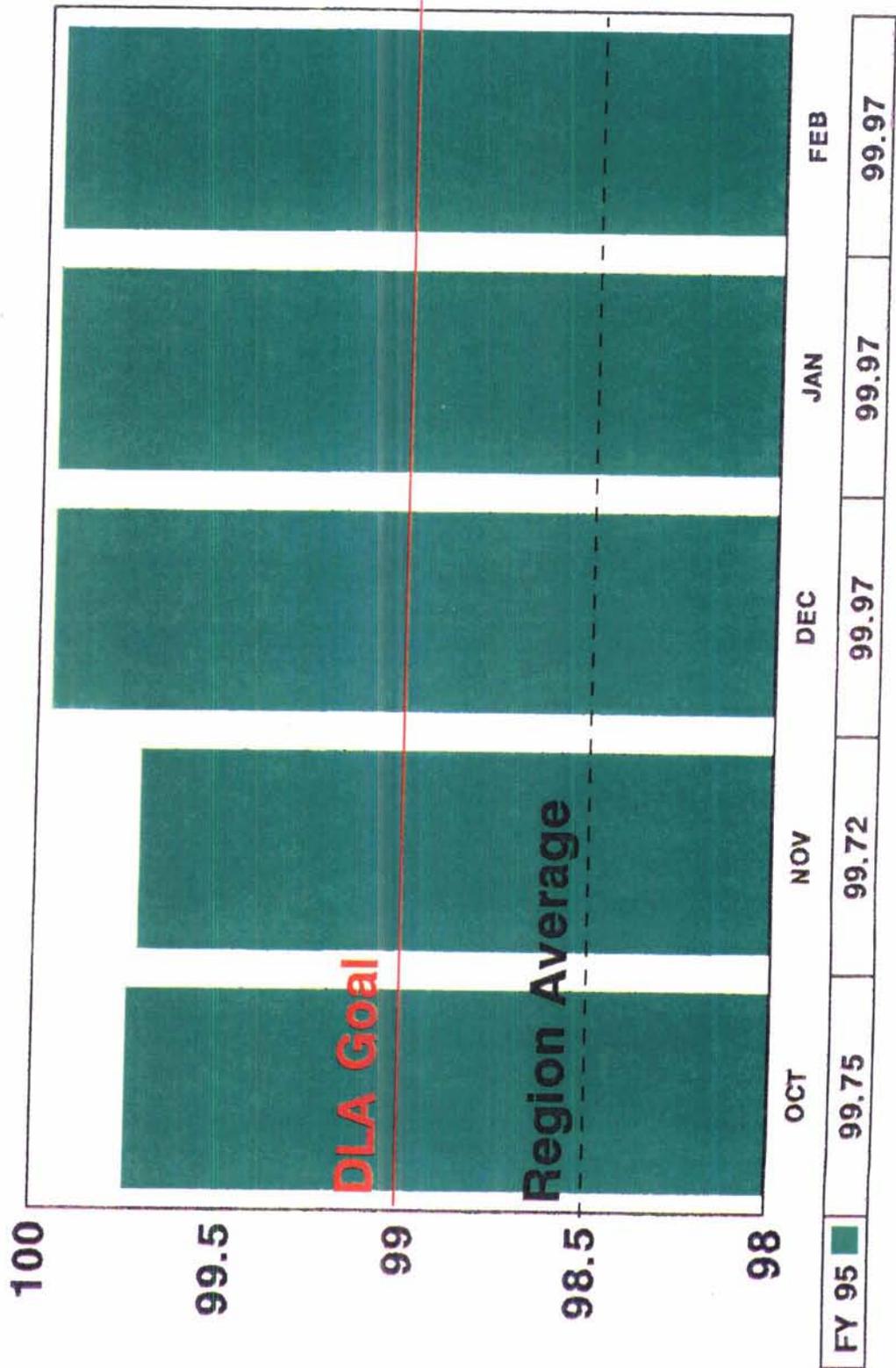
# DENIAL RATE

FY95



# LOCATION ACCURACY

FY 95





# DDMT

## INFRASTRUCTURE INVESTMENT

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PROJECT	BLDG	PDA	CMPL	MILCON	CMPL
CENTRAL PACK	689	\$13,477,237	JUL90	N/A	
HAZ WHSE/RACK SYS	835	2,333,276	SEP89	7,670,572	
HAZ WHSE/PACK SYS	835	564,144	APR91	AS ABOVE	
HAZ WHSE RECOUP	865	N/A		404,000	FEB86
BULK PACK	549	423,432	DEC91	N/A	
GPW I	360	1,983,417	JAN93	6,966,100	JUL91
				(MOD) 480,000	
GPW II	360	2,100,000	DEC96	6,136,143	DEC95
FLAMMABLE STORAGE	925	N/A		1,019,000	SEP94
ATS, TRANSPORTATION	685	9,335,598	APR94	N/A	
TERMINAL					
DINING FACILITY		N/A		404,000	FEB86
BULK RECEIVING	629	3,719,943	DEC94	1,255,115	DEC92
TOTAL		33,937,047		23,854,930	

# **Environmental Restoration Activities**

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- **March 1981 - U.S. Army Environmental Hygiene Agency Completed an Installation Environmental Assessment**
- **April 1989 - September 1990 - Corps of Engineers Conducted Field Work and Presented Preliminary RI/FS Final Report**
- **October 1992 - Depot Placed on EPA's National Priority List**
- **January 1994 - Awarded 5-Year Contract for Follow-On RI/FS**
- **2005 - Site Restoration Complete**

# Installation Personnel

## Organization

DDMT (DEPOT)	1290
DDRE/ASCE (REGION)	148
DRMS (SALES OFFICE)	100
DRMO (DISPOSAL)	38
DSAC-NJ (ADP SUPPORT)	22

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Total	1598
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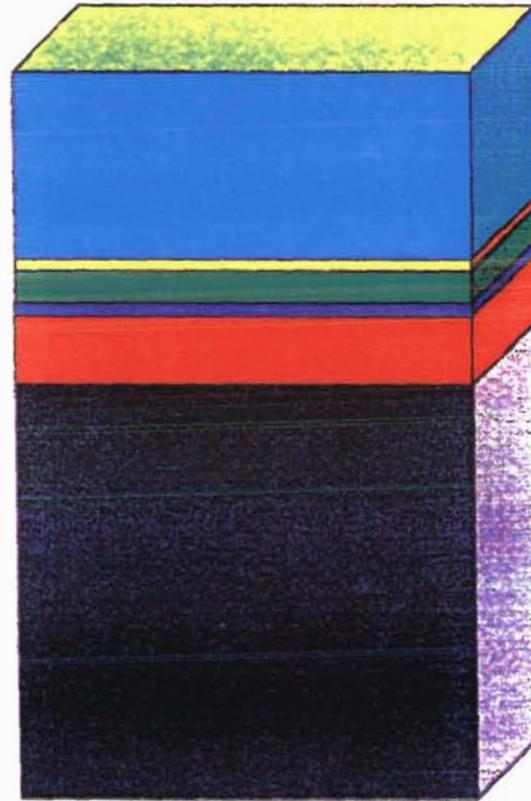
As of 22 March 1995

# FINANCIAL IMPACT

## Fiscal Year 1994

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**Non-Labor**  
**\$23,096,678**



**Labor**

**DSDC \$1,309,810**

**NSO \$4,000,000**

**DRMO \$1,999,131**

**DDRE \$8,296,066**

**DDMT \$50,419,402**

**TOTAL FINANCIAL IMPACT \$89,054,087**

# Workforce Diversity

---

<b>American Indian/Alaskan Native</b>	<b>6 (0.5%)</b>
<b>Asian/Pacific Islander</b>	<b>4 (0.3%)</b>
<b>Black</b>	<b>996 (77.2%)</b>
<b>Hispanic</b>	<b>5 (0.4%)</b>
<b>White</b>	<b>279 (21.6%)</b>

# Work Force Diversity

---

**FEMALE**

**378 (29.3%)**

**MALE**

**912 (70.7%)**

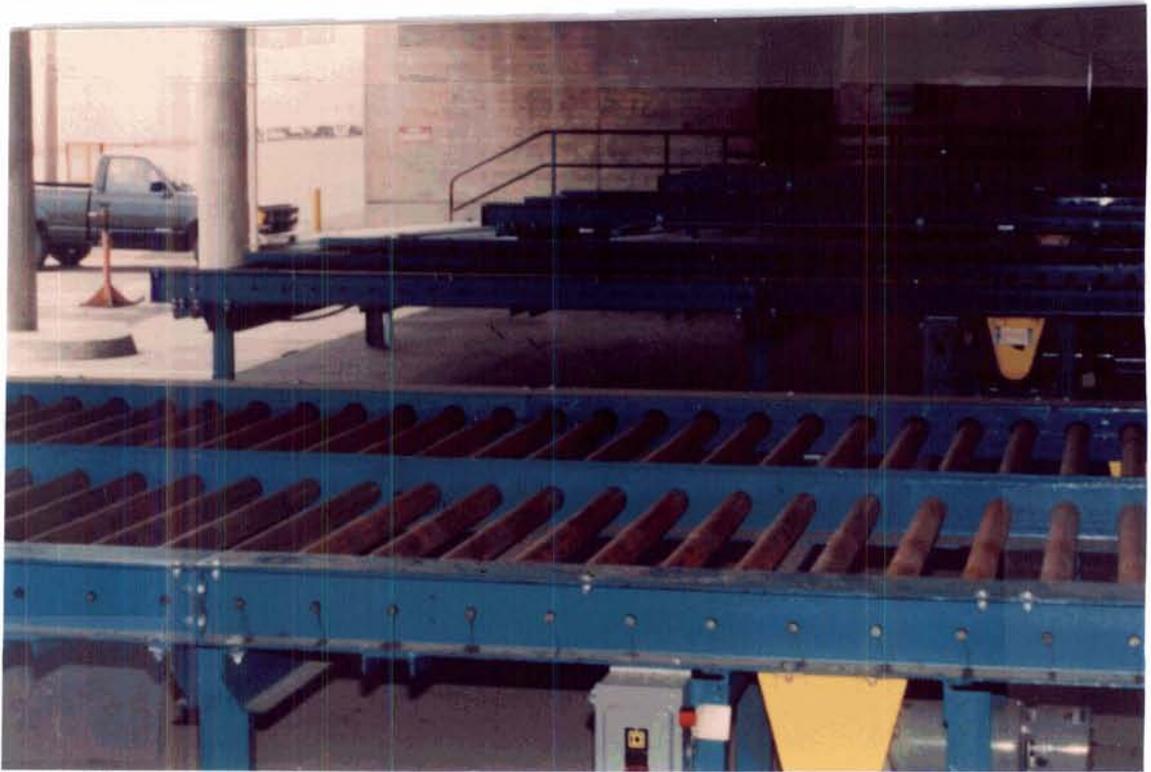
# Workforce Diversity

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## AGE

18 - 25	6 (0.5%)
26 - 35	156 (12.1%)
36 - 45	602 (46%)
46 - 55	436 (33.8%)
56 - 68	90 (7.0%)
Over 68	0
<b>Total</b>	<hr/> <b>1290</b>

**Subsistence Bldg 449/1-5:** The facility is a World War II vintage reinforced concrete building. It is single story, 180 feet 6 inches, by 602 feet 6 inches (outside); 26 feet from floor to top of parapet; has 10 inches thick concrete wall with steel reinforcing; 6 inch thick floor slab; four interior columns (24 inch diameter) per bay; five bays, built up roof over wood decking supported by large wood trusses (8 feet from top to bottom). The facility houses a food test area. The building has five equal sized bays separated by 2 hour fire walls and truck loading docks and railroad loading docks.



**Medical Chill Bldg 359/4:** The facility is a World War II vintage reinforced concrete building. The building has five equal sized bays separated by 2 hour fire walls and truck loading docks and railroad loading docks. In 1973 the facility was converted into a temperature controlled/secured warehouse for the storing, packing and shipping vital medical materials. It is single story, 181 feet by 240 feet 10 inches; 10 inch concrete walls and concrete roof decking; has medical chill and freeze areas, office, breakroom and four restrooms; has conveyor line installed in center of building; a mechanical vent system. Bay 6 houses the base dispensary, which has been designated as fallout shelter for the facility.



**Medical Temp Controlled 560/1-2:** The facility is single story with outside dimensions at 1000 feet by 200 feet; tilt up walls; steel framing and metal siding. It was constructed in 1991 by the Corps of Engineers. The building has five equal sized bays separated by 2 hour fire walls and truck loading docks. The facility has refrigerated areas/secure warehouse for storing, packing and shipping of vital medical materials in Bays 1 & 2. The facility has cargo doors for shipping in Bay 3.





**Central Receiving:** The Central Receiving operation is located in Building 490 and is part of the integrated bin complex. The receiving operation utilizes a mechanized system of conveyors and sorters to process new procurement and customer return receipts. The Central Receiving activity processes approximately 700 receipts per day and moves the material to the adjacent binnable storage locations through a low tow cart/conveyor system.



**Bin Complex:** The Bin Complex consists of six warehouses that were constructed during the Korean Conflict. The complex houses Central Receiving, Bin Storage, Central Pack, and the Transportation Operation. The buildings are interconnected with a series of covered conveyors and passageways. The integrated complex utilizes low tow conveyors to distribute receipts to storage areas. There are a verity of bin storage configurations that range from high-rise, narrow aisle racks, to carousels operation. This complex connects all binnable storage locations to an automated conveyor system that moves the materiel to a centralized mechanized packing facility. The complex has over 400,000 available bin locations.

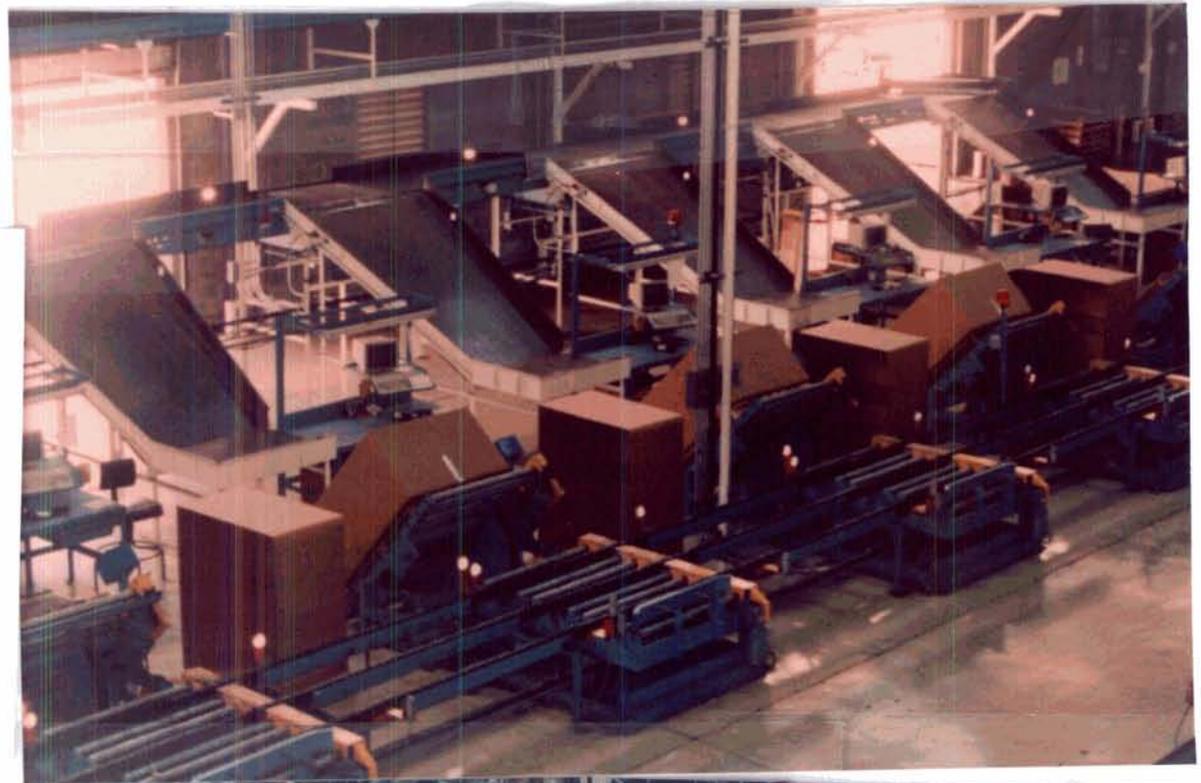


**Central Pack Bldg 689:** A Procurement Defense Activity (PDA) project that was completed in March 1990, that converted three sections of this Korean Conflict vintage warehouse structure to a state of the art mechanized packing facility. The \$7 million project includes a less than truckload (LTL) packing area that handles pallet sized packing requirements from throughout the Depot. There is a bin packing function that receives materiel from via a conveyor system that links the packing facility to the other five buildings in the integrated bin complex. The daily capacity of the Central Pack facility had approximated 18,500 lines per day. This mechanized packing facility is interconnected with the one-of-a-kind Regional Freight Consolidation Center (RFCC) mechanization.

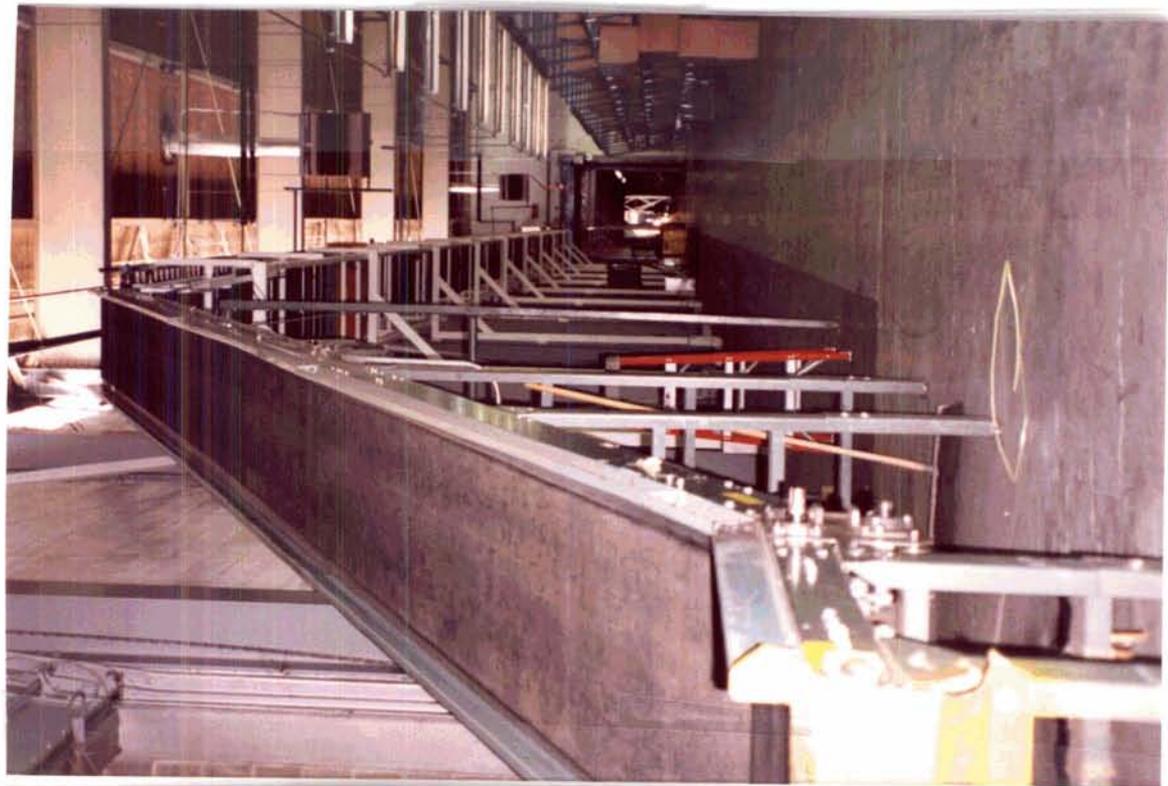


**Central Pack Bldg 689: A**

Procurement Defense Activity (PDA) project that was completed in March 1990, that converted three sections of this Korean Conflict vintage warehouse structure to a state of the art mechanized packing facility. The \$7 million project includes a less than truckload (LTL) packing area that handles pallet sized packing requirements from throughout the Depot. There is a bin packing function that receives materiel from via a conveyor system that links the packing facility to the other five buildings in the integrated bin complex. The daily capacity of the Central Pack facility had approximated 18,500 lines per day. This mechanized packing facility is interconnected with the one-of-a-kind Regional Freight Consolidation Center (RFCC) mechanization.



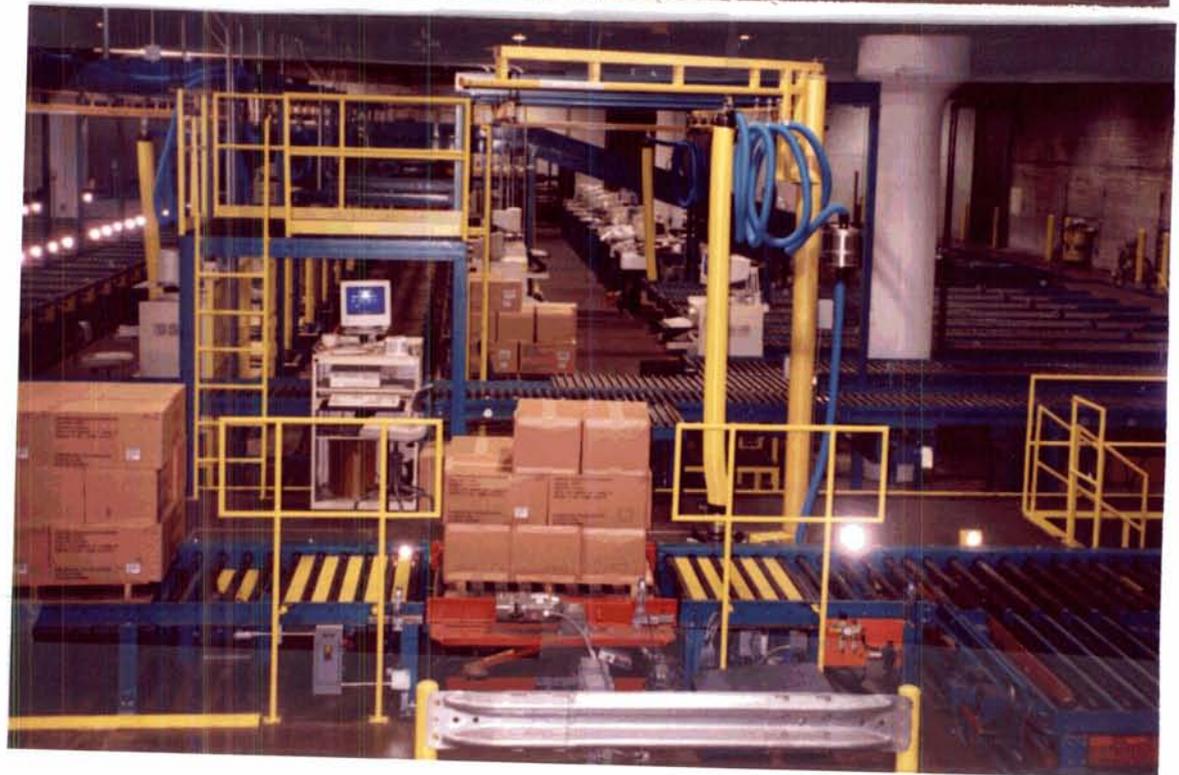
**Shoe/Boot Storage:** During July 1994, DDMT completed a project that created a self-contained footwear storage and issue operation. Section four of Building 670 was converted from pallet storage to a series of walk-thru gravity flow racks. The section was also equipped with two conveyors that tie the shoe/boot operation to the automated Central Pack facility. This project has increased the speed and capacity of the footwear distribution operation.



**Regional Freight Consolidation Center (RFCC):** DDMT was the DLA prototype installation for the RFCC concept. As a distribution "hub" under the RFCC program, mechanization was installed which would allow DDMT to bring less-than-truckload (LTL) shipments from other depots and consolidate those shipments with locally generated freight shipments. Once consolidated, these shipments would be shipped to the customer as either truckload shipments or as a single large LTL shipments.



**Bulk Receiving:** The Bulk Receiving operation moved into a new facility in September 1994. Three sections of Building 629 house the new \$4 million facility that provides state of the art mechanization for bulk receipts. An automated sorter with vacuum lifts and an integrated conveyor system provides the nucleus of the newest DDMT facility.



**Hazardous Bldg 835/1-7:** The facility is a modern concrete building. It was constructed in 1988 by the Corps of Engineers. The outside dimensions are 644 feet by 214 feet; it is build of precast reinforced concrete roofing and framing; tilt up walls, metal siding; lower officer/administrative area has insulated metal decking, built up roof; 15 feet wide variable railroad dock; 4 ramps (one at each corner of the building) and finger dock. Has specialized lighting, electrical and sprinkler systems. The facility is designed to take into consideration the physical and chemical properties of the material stored therein. It is constructed of non-combustible material due to the unusual characteristics of the items stored.



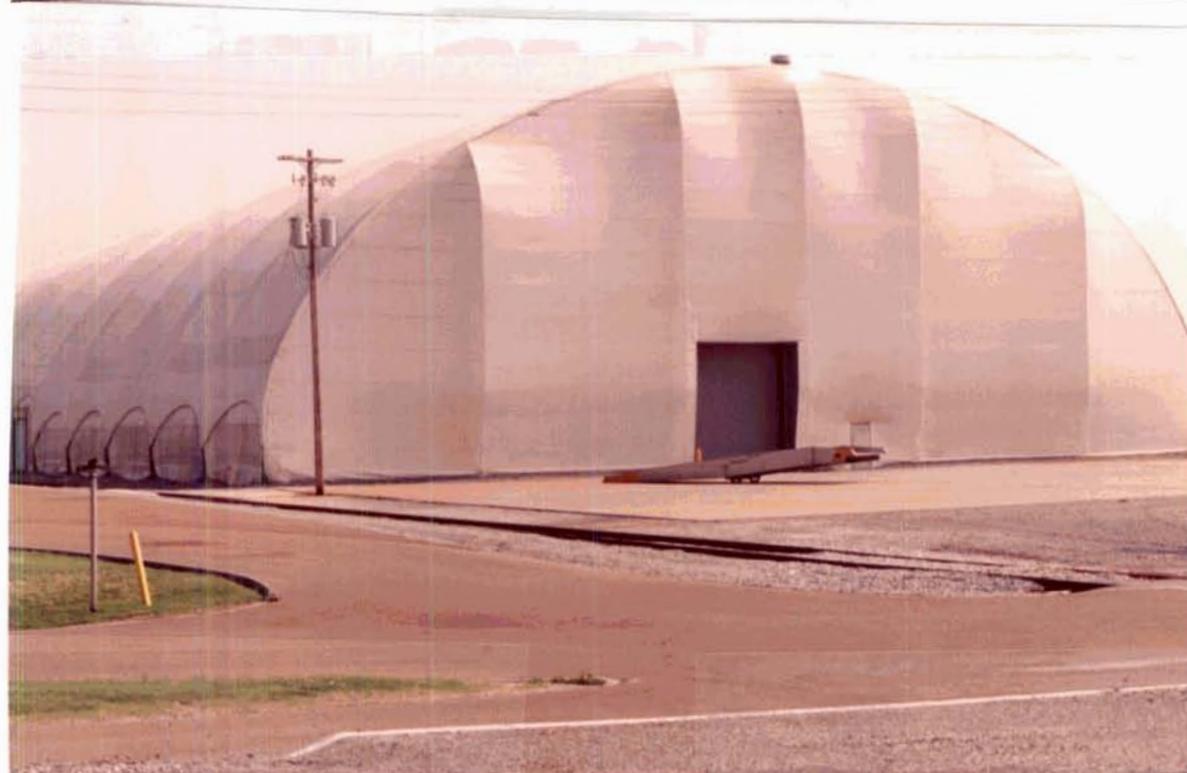
**Recoup Bldg 865:** The facility is a modern concrete building. It was constructed in 1988 by the Corps of Engineers. The facility is completely enclosed without crawl spaces or basements. It has fire resistant walls; the interior firewalls are extended from the floor to the ceiling to provide sufficient segregating for safe recouplement of incompatible material. It has five isolated recouplement workrooms. The workrooms are completely decontaminated between operations. The facility has a ventilation system capable of functioning as a general use mode and emergency mode. The facility was constructed to minimize hazardous waste, loss of stock and maintain product quality. It provides a safe working environment that protects employees against catastrophic illnesses/injuries. It also prevents hazardous materials from contacting incompatible materials, along with preventing the escape of hazardous material into the environment.



**Flammable Storage Bldg 925:** The facility was constructed in 1988 by the Corps of Engineers. The facility is a new facility, built of concrete masonry units; the remainder of the building has steel framing with metal siding; side at 163 feet by 371 feet 5 inches. The facility has four hour fire walls and three sections.



**Port-A-Mod:** This is a fabric structure that was erected in the mid 1980's as an alternative to new warehouse construction. The port-a-mod consists of 60,000 square feet of improved storage that has an improved handstand floor. The facility is used to accommodate special projects and rewarehousing efforts.



**Paint Booth Bldg 1086 & 1087 and  
Sandblasting Chamber Bldg 1088:**

These facilities are used to perform preservation, cleaning, packaging, packing, containerizing and unitizing materiel as appropriate.



**Dunn Field/Defense National**

**Stockpile:** Dunn Field is located north of Dunn Avenue and is the site of the DDMT portion of the Defense National Stockpile. Dunn Field consists of approximately 46 acres and is separated from the main Distribution Depot operation by a city street. The stockpile contains bauxite and fluorspar that has been stored on this site since the 1950's.

