



# eport

DEFENSE INFORMATION SYSTEMS AGENCY MEGACENTER CONSOLIDATION

Report No. 98-159

June 22, 1998

Office of the Inspector General Department of Defense

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#### Acronyms

BRAC	Base Realignment and Closure
BTU	British Thermal Unit
DISA	Defense Information Systems Agency
DMC	Defense Megacenter
FEMA	Federal Emergency Management Agency
IBM	International Business Machines
KVA	Kilovolt-Amperes
ROSC	Regional Operations and Security Center
SMART	Strategy for Mainframe and Regional Transition



#### INSPECTOR GENERAL DEPARTMENT OF DEFENSE 400 ARMY NAVY DRIVE ARLINGTON, VIRGINIA 22202

June 22, 1998

## MEMORANDUM FOR DIRECTOR, DEFENSE INFORMATION SYSTEMS AGENCY

SUBJECT: Audit Report on Defense Information Systems Agency Megacenter Consolidation (Report No. 98-159)

We are providing this audit report for your information and use. The Deputy Secretary of Defense requested that we conduct this audit to review the issues raised by Senator Tom Harkin, Iowa, concerning certain aspects of the Defense Information Systems Agency megacenter consolidation. Because this report contains no recommendations, no written comments were required, and none were received.

We appreciate the courtesies extended to the audit staff. Questions on the audit should be directed to Mr. Wayne K. Million at (703) 604-9312 (DSN 664-9312) or Mr. Nicholas E. Como at (703) 604-9215 (DSN 664-9215). See Appendix Q for the report distribution. The audit team members are listed inside the back cover.

Robert J. Lieberman
Assistant Inspector General
for Auditing

#### Office of the Inspector General, DoD

Report No. 98-159 Project No. 8CG-5017 June 22, 1998

#### Defense Information Systems Agency Megacenter Consolidation

#### **Executive Summary**

Introduction. The Deputy Secretary of Defense requested this audit to review issues raised by Senator Tom Harkin, Iowa, concerning the Defense Information Systems Agency megacenter consolidation. Specifically, Senator Harkin was concerned that errors were made in applying the Defense Information Systems Agency criteria, which resulted in certain megacenters receiving higher than appropriate scoring, and to what extent the Defense Megacenter Rock Island, Illinois, might have been given a lower than appropriate score. A total of 13 issues were raised. Congressman Jim Leach also expressed interest in this matter.

**Audit Objectives.** The audit objective was to review the specific issues raised by Senator Harkin.

Audit Results. The specific concerns raised by Senator Harkin regarding the Defense megacenter consolidation could not be substantiated, although we found other errors.

The Defense Information Systems Agency did not obtain accurate and consistent data, in all cases, to determine scores for the megacenter consolidation. Management controls did not ensure a correct scoring. New scoring, using data validated by our audit, resulted in a change in the rankings. However, the originally ranked top five megacenters remained in the top five ranking. Defense Megacenter Rock Island remained as the sixth ranked megacenter.

The Defense Information Systems Agency acknowledged the data errors disclosed by our audit and revised the scoring accordingly. The agency recomputed the overall ranking for the six megacenters included in our review. The processing megacenters originally ranked as the top five remained in the top five ranking. Defense Megacenter Rock Island remained as the sixth ranked megacenter. Therefore, no recommendation was made to amend the currently approved consolidation plan.

Management Comments. We provided a draft of this report on June 1, 1998. Because this report contains no recommendations, written comments were not required, and none were received. Therefore, we are publishing this report in final form.

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## Part I - Audit Results

## **Audit Background**

The Deputy Secretary of Defense requested that we review the issues raised by Senator Tom Harkin, Iowa, concerning certain aspects of the Defense Information Systems Agency (DISA) megacenter consolidation. Senator Harkin raised issues with the consistency of scores applied to rank the megacenters. The issues involved Defense Megacenters (DMCs) Rock Island, Illinois; Oklahoma City, Oklahoma; Ogden, Utah; Columbus, Ohio; and St. Louis, Missouri. Specifically, Senator Harkin questioned the allocation of DMC space, power and air conditioning capacities, and associated costs to upgrade one of the megacenters to the level required by DISA criteria contained in the Strategy for Mainframe and Regional Transition (SMART) plan, DISA's megacenter consolidation plan. Congressman Jim Leach also expressed interest in this matter.

## **Audit Objectives**

The audit objective was to review the specific issues raised by Senator Harkin concerning certain aspects of the DISA megacenter consolidation. See Appendix A for a discussion of the audit process.

## **Management Controls Over Scoring Procedures of DISA Megacenters**

The specific issues raised by Senator Harkin could not be substantiated. However, DISA did not have adequate management controls to obtain accurate and consistent data, in all cases, to determine numerical scores for the megacenter consolidation rankings. DISA applied the results of our audit to formulate updated scores for the consolidation. The new scoring resulted in a change in the rankings. However, the processing megacenters originally ranked as the top five remained in the top five ranking. DMC Rock Island remained as the sixth ranked megacenter, and its numerical score dropped after errors disclosed during the audit for the six megacenters we reviewed were corrected.

## **DISA Megacenter Consolidation Strategy**

Background. DISA implemented the SMART plan in December 1997 to consolidate DoD mainframe data processing centers from 16 DMCs to 6. Five megacenters will provide International Business Machines (IBM) mainframe processing and two of the five megacenters will also provide UNISYS mainframe processing. The remaining site will provide UNISYS mainframe processing only. Since the announcement of the SMART plan, the process used by DISA for the selection of the megacenters to consolidate has been challenged by the Congressional delegations representing the workforce at DMC Rock Island. A complete listing of the issues raised by Senator Harkin is included in Appendix B and our response to the issues is contained in Appendix C.

Criteria for Megacenter Scoring. The criteria for scoring the DISA processing centers was originally established for use in implementing the 1993 Defense Base Realignment and Closure (BRAC) decisions. During the 1993 BRAC, DISA consolidated 59 information processing centers into 16 DMCs. DISA revised the criteria in November 1994 for participation in the 1995 BRAC process. Specifically, DISA eliminated communications bandwidth, chilled water, communications diversity, and proximity to a fiber optic hub as criteria used to score the megacenters. To obtain current and valid facility baseline data, DISA contracted with an engineering firm, Brown and Root, Incorporated, Houston, Texas, in 1994 to perform a facility baseline survey to verify and update the 1993 baseline study for the 16 megacenters and thoroughly evaluate the actual condition of the 16 megacenter facilities. Subsequent to the Brown and Root survey, DISA decided not to participate in BRAC 1995. However, the criteria established for BRAC 1995 was included verbatim in the SMART plan. See Appendix D for a glossary containing the definitions of criteria that DISA used to rank the megacenters for this consolidation.

### **DISA Megacenter Criteria**

The issues raised by Senator Harkin involved DMCs Rock Island, Illinois; Oklahoma City, Oklahoma; Ogden, Utah; Columbus, Ohio; and St. Louis, Missouri. We visited these megacenters as well as the remaining megacenter, DMC Mechanicsburg, Pennsylvania, that were originally ranked by DISA as the top six megacenters which conducted IBM mainframe processing. DISA applied 12 criteria to rank all 16 megacenters for the site consolidation selection process in the SMART plan. For the 6 megacenters that we visited, we validated the data for the 12 criteria included in the SMART plan. Three criteria (locality pay, disaster vulnerability, and building condition) were validated with source documents as discussed in Appendix A. We did not find any discrepancies between the SMART plan data and reported scores for locality pay, disaster vulnerability, and building condition. Discussions of variations between the SMART plan data and our audit results for 9 of the 12 criteria at the 6 megacenters that we reviewed follow.

**DMC Oklahoma City.** For the nine criteria we reviewed at DMC Oklahoma City, there were minor variations between the SMART plan data and our audit results for three of the criteria as shown in Table 1.

Table 1. Comparison of Audit Results to SMART Plan Data
DMC Oklahoma City

Criteria	SMART Plan Data	Audit Results	Variation
Usable Space <sup>1,2</sup>	66,732	66,732	0
Conditioned Space <sup>2</sup>	64,283	64,283	0
Easily Convertible Space <sup>2</sup>	0	0	0
Other Convertible Space <sup>2</sup>	2,449	2,449	0
Contiguous Space <sup>2</sup>	64,283	64,283	0
Air Conditioning <sup>3</sup>	16,800	16,800	0
Electrical Service Feed <sup>4</sup>	6,000	5,000	(1,000)
Aggregate Regulated Power <sup>4</sup>	4,000	5,000	1,000
Aggregate Regulated Power <sup>4</sup> Back Up Power <sup>4</sup>	6,000	5,000	(1,000)

<sup>&</sup>lt;sup>1</sup>Usable space = conditioned space + easily convertible space + other convertible space.

Electrical Service Feed. We verified the faceplate for each of the two electrical transformers at DMC Oklahoma City. The faceplate showed that the rated capacity of each transformer was 2,500 kilovolt-amperes (KVA), for a total of 5,000 KVA. In addition, we obtained manufacturer specifications that confirmed the rated capacity.

<sup>&</sup>lt;sup>2</sup>Measured in square feet.

<sup>&</sup>lt;sup>3</sup>Measured in BTU/1,000.

<sup>&</sup>lt;sup>4</sup>Measured in KVA.

Aggregate Regulated Power. We verified the faceplate for each of the five aggregate regulated power modules (uninterruptible power supply modules) at DMC Oklahoma City. We obtained the manufacturer specifications on each module, which confirmed that each module had 1,000 KVA, for a total of 5,000 KVA. In addition, we confirmed that all five modules were in operation.

Back Up Power. We verified the electrical service feed to be 5,000 KVA and that the two transformers at DMC Oklahoma City were backed up by an automatic transfer switch from two separate utility feeds. If one transformer fails, the other automatically backs up the electrical power. Therefore, back up power should be equal to the electrical service feed of 5,000 KVA.

**DMC Rock Island.** Of the nine criteria we reviewed at DMC Rock Island, there was a major variation between the SMART plan data and our audit results for one criteria and minor variations between the SMART plan data and our audit results for two other criteria. Because there were variations between the SMART plan data and our audit results for easily convertible space and other convertible space, usable space also varied. Table 2 displays the variations.

DMC Rock Island			
Criteria	SMART Plan Data	Audit Results	Variation
Usable Space <sup>1,2</sup>	114,534	58,091	(56,443)
Conditioned Space <sup>2</sup>	40,213	40,213	<b>0</b>
Easily Convertible Space <sup>2</sup>	14,131	17,878	3,747
Other Convertible Space <sup>2</sup>	60,190	0	(60,190)
Contiguous Space <sup>2</sup>	40,213	40,213	0
Air Conditioning <sup>3</sup>	11,880	14,406	2,526
Electrical Service Feed <sup>4</sup>	9,200	9,200	0
Aggregate Regulated Power <sup>4</sup>	2,800	2,800	0

Table 2. Comparison of Audit Results to SMART Plan Data

9.200

9,200

0

Back Up Power⁴

Easily Convertible Space. The SMART plan criteria provides limitations on convertible space. It states that space must be part of the main DMC building and must be space that is currently paid for by the DMC. The SMART plan criteria defines easily convertible space as "convertible space in the primary megacenter facility which is contiguous to conditioned space, requires little or no demolition, and represents a minor cost for conversion to conditioned space." We verified 3,747 square feet in room 109 using "as-built" drawings prepared by the Rock Island Arsenal Directorate of Public Works. This space was assigned to DMC Rock Island and had not been included as easily convertible space in the

<sup>&</sup>lt;sup>1</sup>Usable space = conditioned space + easily convertible space + other convertible space. <sup>2</sup>Measured in square feet.

<sup>&</sup>lt;sup>3</sup>Measured in BTU/1,000.

<sup>&</sup>lt;sup>4</sup>Measured in KVA.

SMART plan. A Rock Island Arsenal, March 10, 1998 memorandum regarding occupancy of building 350 states that approximately 4,000 square feet (actually 3,747 square feet) of space in room 109 was allocated to the Defense Information Technology Services Organization (presently known as DISA) in 1993. Room 109 is assigned to DMC Rock Island; however, another tenant of Rock Island Arsenal presently occupies the space. The memorandum further states that a "quid pro quo" agreement between the tenant occupying room 109 and DISA exists allowing the tenant to temporarily use the space. We verified that this space met the SMART plan criteria for easily convertible space. Therefore, the 3,747 square feet of space in room 109 should be counted as easily convertible space for DMC Rock Island.

Other Convertible Space. The SMART plan further defines convertible space as "space where an 18-inch raised floor can be installed with a minimum floor to ceiling height of 7.5 feet without structural changes." The 60,190 square feet, categorized as other convertible space in the SMART plan for DMC Rock Island, was administrative offices and Systems Management Center space. We measured the floor to ceiling height of the administrative areas and the Systems Management Center space on the second floor of building 350. The floor to ceiling height was 8 feet in all of the administrative areas we measured and the Systems Management Center space was 8 feet 4 inches. The minimum required floor to ceiling space would have to be at least 9 feet in order to install an 18-inch raised floor. Raising the dropped ceiling to accommodate installing an 18-inch raised floor and still have a 7.5 foot area from the raised floor to the dropped ceiling would entail reworking the fire protection system, air conditioning duct work, and electrical lighting. Reworking the dropped ceiling is considered a structural change, which is not in accordance with the SMART plan definition of other convertible space.

Air Conditioning. We obtained a March 10, 1998, memorandum from the U.S. Army Corps of Engineers, that stated 14,406,000 British Thermal Units (BTUs) of air conditioning is dedicated and available to DMC Rock Island.

**DMC Ogden.** Of the nine criteria we reviewed at DMC Ogden, there were major variations between the SMART plan data and our audit results for three criteria, and minor variations between the SMART plan data and our audit results for two other criteria. Because there were variations between the SMART plan data and our audit results for easily convertible space and other convertible space, usable space also varied. Table 3 displays the variations.

Table 3.	Comparison	of Audit Results to	SMART Plan	Data DMC Ogden
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Criteria	SMART Plan Data	Audit Results	Variation
Usable Space <sup>1,2</sup>	81,322	108,512	27,190
Conditioned Space <sup>2</sup>	40,428	40,428	0
Easily Convertible Space <sup>2</sup>	40,894	56,442	15,548
Other Convertible Space <sup>2</sup>	0	11,642	11,642
Contiguous Space <sup>2</sup>	28,993	40,428	11,435
Air Conditioning <sup>3</sup>	13,200	14,520	1,320
Electrical Service Feed <sup>4</sup>	7,000	7,500	500
Aggregate Regulated Power <sup>4</sup>	2,500	2,500	0
Back Up Power⁴	6,375	6,375	0

<sup>&</sup>lt;sup>1</sup>Usable space = conditioned space + easily convertible space + other convertible space.

Easily Convertible Space. DMC Ogden installed an additional electrical service feed transformer with a 2,500 KVA capacity in 1997, bringing the total electrical service feed to 7,500 KVA. The additional electrical service feed capacity of 2,500 KVA increased the easily convertible space that could be supplied by the existing utilities. We identified an additional 15,548 square feet of easily convertible space at DMC Ogden using "as-built" drawings prepared by FFKR Architects/Planner II. The additional electrical service feed capacity can support the additional space.

Other Convertible Space. As stated in the paragraph above, the additional electrical service feed directly impacted the area of convertible space that could be supplied by the available utilities. We also used the "as-built" drawings to identify 11,642 square feet that had not been previously counted as other convertible space at DMC Ogden. Because of the increase in electrical service feed capacity, the additional square footage can be considered for DMC Ogden as other convertible space.

Contiguous Space. The SMART plan defines contiguous space as "space within the conditioned space which is contiguous either vertically or horizontally." The 40,428 square feet of conditioned space was also contiguous. We verified a horizontal conduit cable connecting the main computer room to the remainder of the conditioned space.

Air Conditioning. We verified six air conditioning units at DMC Ogden. Two units had a rated capacity of 400 tons each; three units had a rated capacity of 100 tons each; and one unit had a rated capacity of 110 tons, for a total of 1,210 tons. The air conditioning unit with a 110-ton rated capacity had been omitted from the air conditioning requirements for DMC Ogden in the SMART plan. This 110-ton air conditioning unit equates to 1,320,000 BTUs. Thus, the total air conditioning capacity at DMC Ogden should have been 14,520,000 BTUs.

<sup>&</sup>lt;sup>2</sup>Measured in square feet.

<sup>&</sup>lt;sup>3</sup>Measured in BTU/1,000.

<sup>&</sup>lt;sup>4</sup>Measured in KVA.

Electrical Service Feed. We verified the rated KVA capacity from the faceplate of each of the three electrical transformers at DMC Ogden. The faceplate showed that the rated capacity of each transformer was 2,000; 3,000; and 2,500 KVA, respectively, for a total of 7,500 KVA. Manufacturer specifications for the transformers were not available.

**DMC Columbus.** Of the nine criteria we reviewed at DMC Columbus, there was a major variation between the SMART plan data and our audit results for one criteria and minor variations between the SMART plan data and our audit results for six other criteria. Because there were variations between the SMART plan data and our audit results for conditioned space, easily convertible space, and other convertible space, usable space also varied. Table 4 displays the variations.

Table 4.	Comparison of Audit Results to SMART Plan Data
	DMC Columbus

Criteria	SMART Plan Data	Audit Results	Variation
Usable Space <sup>1,2</sup>	86,463	70,820	(15,643)
Conditioned Space <sup>2</sup>	67,688	65,134	(2,554)
Easily Convertible Space <sup>2</sup>	5,643	5,686	43
Other Convertible Space <sup>2</sup>	13,132	0	(13,132)
Contiguous Space <sup>2</sup>	67,688	65,134	(2,554)
Air Conditioning <sup>3</sup>	15,360	14,400	(960)
Electrical Service Feed <sup>4</sup>	6,000	6,000	0
Aggregate Regulated Power <sup>4</sup>	4,688	3,750	(938)
Back Up Power <sup>4</sup>	3,750	4,690	940

<sup>&</sup>lt;sup>1</sup>Usable space = conditioned space + easily convertible space + other convertible space.

Conditioned Space. We used "as-built" drawings prepared by the U.S. Army Corps of Engineers to verify 65,134 square feet of conditioned space in building 23 at DMC Columbus. We confirmed these measurements with DMC Columbus facilities personnel.

Easily Convertible Space. We also used the "as-built" drawings prepared by the U.S. Army Corps of Engineers to verify 5,686 square feet of easily convertible space in building 23. DMC Columbus facilities personnel also confirmed these measurements.

Other Convertible Space. DMC Columbus facilities personnel double-counted 13,132 square feet of conditioned space as both conditioned space and other convertible space. The 13,132 square feet of space meets the SMART plan criteria for conditioned space. DMC Columbus facilities personnel acknowledged the double-counting error.

<sup>&</sup>lt;sup>2</sup>Measured in square feet.

<sup>&</sup>lt;sup>3</sup>Measured in BTU/1,000.

<sup>&</sup>lt;sup>4</sup>Measured in KVA.

Contiguous Space. We verified that there was only 65,134 square feet of conditioned space at DMC Columbus, which was both horizontally and vertically contiguous.

Air Conditioning. We verified three air conditioning units with a rated capacity of 400 tons each, for a total of 1,200 tons. The manufacturer specifications for the air conditioning units confirmed the rated capacity of 400 tons each. The 1,200-ton air conditioning capacity equates to 14,400,000 BTUs.

Aggregate Regulated Power. We verified the faceplate for each of the five aggregate regulated power modules (uninterruptible power supply modules) at DMC Columbus. We obtained the manufacturer specifications on each module, which confirmed that each module had 750 KVA each, for a total of 3,750 KVA.

**Back Up Power.** We verified the faceplate and the manufacturer specifications for each of the five generators at DMC Columbus. Each generator had a rated capacity of 938 KVA, for a total of 4,690 KVA.

**DMC Mechanicsburg.** Of the nine criteria we reviewed at DMC Mechanicsburg, there were major variations between the SMART plan data and our audit results for two criteria and minor variations between the SMART plan data and our audit results for two other criteria. Because there were variations between the SMART plan data and our audit results for conditioned space and easily convertible space, usable space also varied. Table 5 displays the variations.

Table 5.	Comparison of Audit Results to SMART Plan Data
	DMC Mechanicsburg

Criteria	SMART Plan Data	Audit Results	Variation
Usable Space <sup>1,2</sup>	60,682	65,051	4,369
Conditioned Space <sup>2</sup>	49,682	48,735	(947)
Easily Convertible Space <sup>2</sup>	11,000	16,316	5,316
Other Convertible Space <sup>2</sup>	0	0	0
Contiguous Space <sup>2</sup>	49,682	48,735	(947)
Air Conditioning <sup>3</sup>	14,500	18,000	3,500
Electrical Service Feed <sup>4</sup>	7,500	7,500	0
Aggregate Regulated Power <sup>4</sup>	3,750	3,750	0
Aggregate Regulated Power <sup>4</sup> Back Up Power <sup>4</sup>	7,500	7,500	0

<sup>&</sup>lt;sup>1</sup>Usable space = conditioned space + easily convertible space + other convertible space.

<sup>&</sup>lt;sup>2</sup>Measured in square feet.

<sup>&</sup>lt;sup>3</sup>Measured in BTU/1,000.

<sup>&</sup>lt;sup>4</sup>Measured in KVA.

Conditioned Space. We verified only 48,735 square feet of conditioned space in building 308 using DMC Mechanicsburg aperture drawings. DMC Mechanicsburg facilities personnel confirmed these measurements.

Easily Convertible Space. The SMART plan states that convertible space must be space where an 18-inch raised floor can be installed with a minimum floor to ceiling height of 7.5 feet without structural changes. We used the DMC Mechanicsburg aperture drawings to verify the square footage of easily convertible space in building 308. There were three rooms, totaling 16,316 square feet of easily convertible space. The tape room, totaling 6,816 square feet, had a 12-inch raised floor and 8 feet of space between the raised floor and the dropped ceiling. The electronic accounting machine room and automated tape library room, totaling 4,000 and 5,500 square feet respectively, had a 6-inch raised floor and 9 feet 10 inches of space between the raised floor and dropped ceiling. In addition, these rooms had provisions for air conditioning and power distribution. The three rooms met the criteria for easily convertible space for a total of 16,316 square feet. DMC Mechanicsburg facilities personnel also confirmed these measurements.

Contiguous Space. We verified that the 48,735 square feet of conditioned space in building 308 was also contiguous. The configuration of building 308 is such that the area of conditioned space is situated in one area and is horizontally contiguous.

Air Conditioning. We verified that DMC Mechanicsburg had three air conditioning units with a rated capacity of 450 tons each, for a total of 1,350 tons. In addition, we verified an additional air conditioning unit with 150 tons capacity for a grand total of 1,500 tons in building 308. The manufacturer specifications for the air conditioning units confirmed the rated capacities. The 1,500 tons air conditioning capacity equates to 18,000,000 BTUs.

**DMC St. Louis.** Of the nine criteria we reviewed at DMC St. Louis, there were major variations between the SMART plan data and our audit results for two of the criteria and minor variations between the SMART plan data and our audit results for three other criteria. Because there were variations between the SMART plan data and our audit results for easily convertible space and other convertible space, usable space also varied. Table 6 displays the variations.

Table 6.	Comparison	of Audit	Results	to SMART	Plan Data
	-	DMC St			

Criteria	SMART Plan Data	Audit Results	Variation
Usable Space <sup>1,2</sup>	107,128	108,278	1,150
Conditioned Space <sup>2</sup>	24,737	24,737	0
Easily Convertible Space <sup>2</sup>	40,304	40,238	(66)
Other Convertible Space <sup>2</sup>	42,087	43,303	1,216
Contiguous Space <sup>2</sup>	24,737	24,737	0
Air Conditioning <sup>3</sup>	29,040	29,508	468
Electrical Service Feed <sup>4</sup>	7,000	12,500	5,500
Aggregate Regulated Power <sup>4</sup>	3,675	3,675	0
Back Up Power <sup>4</sup>	7,000	12,500	5,500

<sup>&</sup>lt;sup>1</sup>Usable space = conditioned space + easily convertible space + other convertible space.

Easily Convertible Space. We used "as-built" drawings prepared by Calcara, Duffendack, Foss, Manlove, Inc. and revised by the General Services Administration to verify 40,238 square feet of easily convertible space in building 103 at DMC St. Louis. DISA had incorrectly included a stairwell, totaling 66 square feet, as easily convertible space for DMC St. Louis. The SMART plan states that stairways should not be counted as convertible space. DMC St. Louis facilities personnel also confirmed these measurements.

Other Convertible Space. We also used the "as-built" drawings to identify 43,303 square feet of other convertible space in building 103. There were three rooms in building 103 that had not been previously counted by DISA that had more than 9 feet of space from the concrete floor to the dropped ceiling. DMC St. Louis had previously used these rooms as offices, but the rooms were currently being used for storage of office equipment. These three rooms should have been counted as other convertible space, bringing the total for other convertible space to 43,303 square feet.

Air Conditioning. We verified seven air conditioning units with a total rated capacity of 2,459 tons. Four units had a rated capacity of 600 tons each, two units had a rated capacity of 27 tons each, and one unit had a rated capacity of 5 tons. We obtained the manufacturer specifications for the seven air conditioning units, which confirmed the rated capacities. The 2,459 tons air conditioning capacity equates to 29,508,000 BTUs.

Electrical Service Feed. We verified the rated KVA capacity from the faceplate of each of the seven transformers at DMC St. Louis. The faceplates showed that two transformers had a rated capacity of 2,500 KVA each; three transformers had a rated capacity of 2,000 KVA each; and two transformers had a

<sup>&</sup>lt;sup>2</sup>Measured in square feet.

<sup>&</sup>lt;sup>3</sup>Measured in BTU/1,000.

<sup>&</sup>lt;sup>4</sup>Measured in KVA.

rated capacity of 750 KVA each, for a total electrical service feed of 12,500 KVA. Manufacturer specifications for the transformers were not available.

**Back Up Power.** We verified that all seven transformers at DMC St. Louis were backed up by an automatic transfer switch from two separate utility feeds. If one transformer fails, the other transformers automatically back up the electrical power. Therefore, back up power at DMC St. Louis should be equal to the electrical service feed of 12,500 KVA.

## Management Controls Over DISA Megacenter Scoring

Prior Inspector General, DoD, Reports Addressing DISA Management Controls. Inspector General, DoD, Report No. 95-065, "Defense Information Systems Agency Implementation of the Internal Control Plan for the 1995 Defense Base Realignment and Closure Data Collection Process," December 30, 1994, addresses DISA management controls for data collection. Specifically, the report states, that during the BRAC 1995 data collection process, DISA had not approved and implemented its draft internal control plan, but had begun to collect data that could be used to support a 1995 BRAC decision. Collecting data to support a BRAC decision without an approved management control plan was not in accordance with required procedures for the 1995 BRAC process. The report further states that a management (internal) control plan would ensure adequate organization, documentation, and data control during all phases of the 1995 BRAC process. The report recommended that DISA approve and implement an internal control plan for its data collection and analysis process for BRAC 1995 and discontinue any further data analysis until the analysis is accomplished with an approved, unbiased process outlined in the draft internal control plan. DISA concurred with the audit recommendations.

Inspector General, DoD, Report No. 95-120, "Defense Information Systems Agency Verification of the 1995 Defense Base Realignment and Closure Data Elements and Ranking Procedure," February 17, 1995, again addresses management controls for data collection. DISA elected not to participate in the BRAC 1995 process. However, the agency requested that the Inspector General, DoD verify the accuracy of the data elements and the consistency of the application of the computer facility ranking procedures that would have been the basis for a formal submission to the Secretary of Defense (recommending DMC closures in BRAC 1995). The report states that DISA accurately and consistently collected and analyzed the facilities, cost, and computer utilization data that they intended to use to support a BRAC 1995 decision. The report also states that DISA properly implemented a computer algorithm and weighted selection criteria that were used to rank its computer facilities. However, the audit identified errors in contractor-generated information that was used in the development of space renovation costs. During the audit, DISA corrected contractor errors noted and no further action was recommended or required.

#### **Conclusion**

DISA collected data listed in the SMART plan in accordance with its management control plan certification procedures. However, DISA did not have adequate management controls to obtain accurate and consistent data, in all cases, for input to the ranking process. The variations between the data used in the SMART plan and our audit results were discussed and resolved with DISA management during April and May 1998. DISA agreed with all of our audit results and revised the input for the criteria in the SMART plan for the megacenters accordingly. DISA then recomputed the overall ranking for the megacenters included in our review. The processing megacenters originally ranked as the top five, remained in the top five ranking. DMC Rock Island remained as the sixth ranked megacenter, and its numerical score dropped because of criteria errors disclosed during the audit for the six megacenters we reviewed. The consolidation plan variations between prior audit numerical scores and post audit numerical scores ranged between 1.58 and 4.81 points. The next mainframe processing megacenter below DMC Rock Island would need at least 7.7 points to be considered as one of the top five ranked megacenters. No recommendation was made to amend the currently approved consolidation plan.

## **Part II - Additional Information**

## Appendix A. Audit Process

### Scope

Work Performed. We reviewed issues raised by Senator Harkin concerning the realignment of the Rock Island megacenter. The issues involved application of criteria for DMCs Oklahoma City, Rock Island, Ogden, Columbus, and St. Louis. See Appendix C for the specific issues and our conclusions. We also reviewed space and power capacities at the megacenters originally ranked as the top 5, plus DMC Rock Island. We validated that the correct data for each of the 12 criteria at the 6 megacenters we reviewed was correctly input into the DISA computer algorithm.

We visited the five megacenters that contained issues raised by Senator Harkin as well as the remaining megacenter (DMC Mechanicsburg), that were originally ranked by DISA as the top six megacenters. The top five megacenters were Mechanicsburg, St. Louis, Oklahoma City, Columbus, and Ogden. DMC Rock Island was the sixth ranked megacenter.

DISA applied the 12 criteria in the SMART plan to rank the 16 megacenters for the site selection process. We validated 9 of the 12 criteria involving usable space and power capacities included in the SMART plan. The remaining three criteria were validated as follows. Locality pay was validated with locality pay rates provided by the Office of Personnel Management for calendar year 1997. Disaster vulnerability was validated with a study obtained from the Federal Emergency Management Agency (FEMA), which ranked standard metropolitan statistical areas in accordance with a derived scale of disaster vulnerability as of 1994. In addition, we contacted FEMA and discussed the accuracy of the study. The score for building condition, as determined by the Brown and Root, Incorporated 1994 facility baseline survey, was used unchanged by DISA in the SMART plan analysis and we accepted the Brown and Root, Incorporated facility baseline survey for purposes of our audit.

Limitations to Audit Scope. We did not validate the computational aspects of the computer algorithm used by DISA to rank the megacenters. We were unable to obtain background data for the FEMA disaster vulnerability study and therefore were unable to verify the vulnerability scores for the specific locations.

## Methodology

Use of Technical Assistance. An Inspector General, DoD engineer visited DMC Oklahoma City and reviewed provisions for air conditioning and power distribution.

Audit Type, Dates, and Standards. This requested audit was performed from February 1998 through May 1998 in accordance with auditing standards issued by the Comptroller General of the United States as implemented by the Inspector General, DoD. We did not use computer-processed data to perform this audit.

Contacts During the Audit. We visited or contacted individuals and organizations within DoD and FEMA. We also visited or contacted architect and engineer contractors as well as electrical, mechanical, and structural engineering contractors applicable to the facilities reviewed. Further details are available upon request.

### **Management Control Program**

DoD Directive 5010.38, "Management Control (MC) Program" dated August 26, 1996, requires DoD organizations to implement a comprehensive system of management controls that provides reasonable assurance that programs are operating as intended and to evaluate the adequacy of the controls.

Scope of Review of the Management Control Program. We reviewed the adequacy of the DISA management controls over the collection of data which was included in the SMART plan for the DMC consolidation. Specifically, we reviewed the accuracy of the SMART plan data that had been certified by each megacenter director.

Adequacy of Management Controls. We identified a material management control weakness for DISA as defined by DoD Directive 5010.38. DISA did not obtain accurate and consistent data, in all cases, to determine numerical scores for the megacenter consolidation. Management controls implemented by DISA did not ensure the correct scoring for the megacenter consolidation. Based on our audit results, DISA recomputed the overall ranking for the megacenters.

Adequacy of Management's Self-Evaluation. We did not review the self-evaluation aspect of the management control program as it relates to the principal audit objectives because it was outside the scope of the audit request.

# Appendix B. Request From Senator Harkin's Office Regarding DMC Rock Island

Scope of requested study:

The delegation is looking for a narrow scope study specifically to determine the extent to which certain errors made in applying the criteria resulted in certain megacenters receiving higher than appropriate scoring and to what extent was Rock Island given a lower than appropriate score

The delegation expects that this analysis can be done in a short period of time, ideally in less than 3 weeks.

1) That the allocation of conditioned space at Oklahoma City was inappropriately allocated.

According to DISA personnel, the criteria definitions was set in 1994. They discussed changing the criteria afterwards. But returned to the 1994 criteria unchanged. For conditioned space, the following elements are required:

- A) it is "immediately available" to install computers
- B) it can be done "without additional investment"
- C) it has an 18" raised floor
- D) it has "provision for air conditioning and power cable Distribution.

In staff meetings, DISA staff first indicated that conditioned space could not have staff working on it. That was the case in Oklahoma City. And, they changed their mind.

In a meeting with Senator Harkin and Leach, DISA staff indicated that although chilling equipment and electrical equipment that was in the computer room was not present throughout the rest of the facility designated as conditioned space, it was "stubbed in" under the floor. They indicated that the above raised floor equipment could be rolled in and "plugged in" implying that it could be installed within hours at minimal cost.

In later correspondence, we were told that the "without additional investment" meant that \$100,000 per installation. And, in discussions they were not willing to tell us what "installation" meant.

A qualified engineer went to Oklahoma City and discovered that chiller pipe and electrical equipment was not available in large segments of the designated space. And, even if the \$100,000 definition of cost was acceptable, which we question, it still could not be met. He also indicates that the time requirement for installation would be considerable. We also question if certain space at Oklahoma City meets the contiguous requirement.

DISA has countered that new types of computer equipment does not require chiller water. Some have questioned the availability of such equipment. We believe that the electrical support for such computer equipment is not available. But, in any case, DISA should be held to the criteria that was supposed to be used to judge the space at all facilities that was in place when Brown and Root conducted their analysis. Clearly, chiller water was a requirement at that time.

That DISA does not have plans to use the space for computers at this time is not relevant. The criteria requires that space meet the requirement for being available for use under the criteria. And, clearly, under the criteria, so the appropriate space should be downgraded. We believe the downgrading should be to the levels indicated in Gary Lenhart's engineering report. It indicates that the cost of upgrading all of the so called conditioned space to a level comparable to the computer now used space is \$2 million. And, that specific areas could not be upgraded for use by a single mainframe for under \$100,000.

- 2) Space at Ogden which is not occupied by DISA should not be counted. It is occupied by the 75th Communications Squadron and the Air Force Materials Systems Group. At Columbus, counted space is being used by the Regional Control Center, not the DMC and should not be counted. If for reasons not apparent to us, these spaces are counted, similar space at Rock Island should be counted. The types of agreements being used to justify the space used at these two sites is, we are told, in place at Rock Island. Consistency should demand the counting of 280,000 square feet of space at Rock Island as total available space.
- 3) Space at Rock Island was underrated. 6,600 feet System Management Space excluded at Rock Island should be counted given that similar types of space were counted at Oklahoma City. Given the criteria explanations for cost of conversion and 3800 sq feet of disallowance of space at Rock Island because it had staff working sites on it, we believe that space at Rock Island should be upgraded.
- 4) Erroneous data was used regarding disaster vulnerability. DISA data shows no federally declared disasters at St. Louis. We believe the number is, in fact, 14. It appears that the data for St Cloud Minn, may have been transposed. That should be corrected.

## Appendix C. Responses to Issues Raised by Senator Harkin's Office

## Issue 1. The conditioned space at the Oklahoma City Megacenter was inappropriately allocated.

Senator Harkin's office contended that:

According to DISA personnel, the criteria definitions was [were] set in 1994. They discussed changing the criteria afterwards. But [DISA] returned to the 1994 criteria unchanged. For conditioned space, the following elements are required:

- A) it is "immediately available" to install computers
- B) it can be done "without additional investment"
- C) it has an 18" raised floor
- D) it has "provision for air conditioning and power cable distribution."

Criteria for Conditioned Space. To participate in the BRAC process, BRAC law required a definition of general criteria in selecting military installations for closure or realignment for BRAC 1995. DISA established criteria for conditioned space in the "1995 BRAC Selection Measures, Definitions, Ranking Weights and Ranking Algorithm," November 21, 1994. Paragraph 2.1 of the DISA criteria, "Facilities Measures," defines conditioned space as "a subset of usable space," which is immediately available for installation of computer hardware requiring a controlled environment, measured in square feet. As a minimum, such space must provide a controlled environment and a raised floor air conditioning plenum 18 inches or higher above the subfloor with provisions for air conditioning and power cable distribution with no additional investment. That criterion was included verbatim in the SMART plan Section 4.1, "Site Selection Measures and Ranking Process," Paragraph 2.1, "Facilities Measures," November 26, 1997.

Audit Results. Accompanied by DMC Oklahoma City facilities personnel and the commercial contractors who directed the electrical and mechanical engineering aspects of the construction of building 3900, we verified the 64,283 square feet of conditioned space in building 3900 at DMC Oklahoma City. The 64,283 square feet of conditioned space had a 24-inch raised floor and had provisions for air conditioning and power cable distribution. However, 11,578 square feet of the 64,283 square feet had office personnel occupying the space. Nominal expenses for relocating those office personnel would be required; however, no additional capital investment would be required to make the 11,578 square feet of space immediately available. The remaining 52,705 square feet of conditioned space was immediately available. The following will address each criteria of the SMART plan definition of conditioned space to the 11,578 square feet of space in question at DMC Oklahoma City.

Immediate Availability of Space to Install Computer Hardware.

Currently, office personnel occupy the east wing of building 3900 that comprises

11,578 square feet of conditioned space. DISA had not defined a time frame for "immediately available." Therefore, we obtained an estimate from the Deputy Director, DMC Oklahoma City, March 4, 1998, of the approximate timeframe and costs to prepare the space in question for the installation of computer hardware. The estimate showed that in-house DISA personnel could disassemble and remove all furniture modules from the referenced area in less than two weeks. The work could be accomplished during nonworking hours of operation. In addition, the estimate showed that expenses for a licensed electrician would be required to disconnect and reconnect the electrical power, which would take approximately 40 hours at \$40 per hour. Therefore, the average time for preparing the east wing of building 3900 for installation of computer hardware could be as much as 3 weeks. See Appendix E for the detailed cost estimate of time and costs associated with preparing the east wing of building 3900 for installation of computer hardware.

We also obtained estimated delivery times from the General Services Administration for four computer (hardware) mainframe vendors that DISA has contracted with to purchase computer mainframes. The delivery times after receipt of a computer purchase request ranged between 30 and 180 days. See Appendix F for the General Services Administration "Schedule Information for Ordering Agencies" for the four computer mainframe vendors. We obtained this information to determine whether the time frame for preparing the space in question was reasonable. Because the time associated with preparing the east wing of building 3900 is less than the minimum time for computer deliveries of 30 days, we conclude that the space in question is immediately available for the installation of computer mainframes.

Without Additional Investment. We did not identify any capital investment costs required for upgrading the space in question. There were expenses required to prepare the east wing for installation of computer hardware. Those expenses included costs to move office equipment from the conditioned space and associated costs for disassembling and removing all furniture modules and disconnecting the power. The maximum estimated cost to prepare the east wing for the installation of computer hardware as provided by DMC Oklahoma City (see Appendix E) is \$1,920. When the office equipment is removed from the space in question, the space would be ready for the installation of computer mainframes.

Conditioned Space Requirement for an 18-Inch Raised Floor. Accompanied by DMC Oklahoma City facilities personnel and the commercial contractors who directed the electrical and mechanical aspects of the construction of building 3900, we verified that the entire 11,578 square feet of space in the east wing of building 3900 had a 24-inch raised floor.

Provisions for Air Conditioning and Power Distribution. DMC Oklahoma City facilities personnel and the commercial contractors who directed the electrical and mechanical aspects of the construction of building 3900 stated that there already was sufficient air conditioning capacity in the east wing of building 3900 to support computer mainframe operations. An Inspector General, DoD electrical engineer visited DMC Oklahoma City during April 22 through 24, 1998, and reviewed the provisions for air conditioning and power distribution

with DMC facilities technical staff and management. The engineer verified that the central plant provided the air conditioning requirements for the entire building, including the east wing. The east wing cooling controls were set for personnel occupancy.

Building 3900 has 16,800,000 BTUs of air conditioning capacity. Brown and Root, Incorporated provided the industry conversion factor for the BTU requirement per square foot of computer floor space. Based on this conversion factor, computer floor space requires air conditioning capacity of 170.7 BTUs per square foot. Brown and Root also provided the electrical power requirement associated with the air conditioning requirement. Based on the air conditioning per square foot requirement of 170.7 BTUs, a computer facility would also require at least 3,414 KVA of electric power.

We computed that building 3900 has air conditioning capacity of 183.6 BTUs per square foot (16,800,000 BTUs/91,502 square feet total space). Therefore, the DMC has air conditioning provisions for computer operations for the entire building, including the 11,578 square feet in the east wing of the facility. In addition, we verified that building 3900 has 5,000 KVA of electric power, exceeding the 3,414 KVA requirement for electric power.

The Inspector General, DoD engineer met with the commercial contractors who were responsible for the construction and supplemental electrical installations for building 3900. The Inspector General, DoD engineer verified the existence of nine 4-inch diameter electrical conduits connecting the east and west wings by reviewing the conduit runs on the floor plan and visually inspecting the conduit run terminations. The conduits are available to provide capacity for additional data and power cabling distribution, if required. See Appendix G for the Inspector General, DoD engineering analysis for DMC Oklahoma City.

## Issue 2. Use of certain conditioned space at DMC Oklahoma City.

Senator Harkin's office was concerned that "In staff meetings, DISA staff first indicated that conditioned space could not have staff working on it. This was the case in Oklahoma City. And they changed their mind."

Criteria For Use of Conditioned Space. Neither the 1994 selection measures for BRAC 1995 nor the SMART plan criteria contain any prohibitions on the use of conditioned space for DISA office personnel. The criterion does not address types of megacenter functions or personnel uses of conditioned space.

Audit Results. The 11,578 square feet of conditioned space in the east wing of building 3900 meets all the physical criteria for conditioned space. Neither the 1994 selection measures for BRAC 1995 nor the SMART plan criteria prohibited DISA staff working in an office environment in conditioned space. We based our review on SMART plan criteria.

# Issue 3. The presence and availability of chilled water and electrical equipment and its impact on the designation of conditioned space.

Senator Harkin's office was concerned that:

In a meeting with Senator Harkin and Leach, DISA staff indicated that although chilling equipment and electrical equipment that was in the [Oklahoma City] computer room was not present throughout the rest of the facility designated as conditioned space, it was 'stubbed in' under the floor. They indicated that the above raised floor equipment could be rolled in and 'plugged in' implying that it could be installed within hours at minimal cost.

Audit Results. Chilling equipment (provisions for chilled water) was a BRAC 1993 criteria for conditioned space. However, this requirement was eliminated in Section 4.1, "Site Selection Measures and Ranking Process," Paragraph 3, "Ranking Weights," of the SMART plan. See Appendix D for a glossary of criteria used to rank the megacenters. Accompanied by DMC Oklahoma City facilities personnel and the commercial contractors who directed the electrical and mechanical aspects of the construction of building 3900, we confirmed that electrical equipment was available throughout building 3900, including the 11,578 square foot area currently being used by office personnel. The Inspector General, DoD engineer verified that the air conditioning and electrical requirements for the entire building, including the east wing, were provided by the central plant.

In addition, the Inspector General, DoD engineer verified that the 19 power distribution units were physically located in building 3900. Sixteen of the 19 are currently installed and in use. The remaining three units can be relocated wherever needed in building 3900, including the east wing. DMC facility personnel stated that moving and connecting the power distribution units is covered under the interservice support agreement with Tinker Air Force Base. See Appendix G for the Inspector General, DoD engineering analysis for DMC Oklahoma City.

## Issue 4. The dollar value limit which would signify "without additional investment" per the criteria for conditioned space.

Senator Harkin's office was concerned that:

In later correspondence [between DISA and Senator Harkin], we were told that the 'without additional investment' meant that [sic] \$100,000 per installation. And, in discussions [between DISA and Senator Harkin] they [DISA] were not willing to tell us what 'installation' meant

Background. DISA initially responded to this issue in a response to questions raised by Senator Harkin on December 30, 1997. DISA explained that the "additional investment" limit of \$100,000 involved workload migration costs because of consolidation. Migrating workload costs include site preparation costs for the installation of new computer systems. In the December 30, 1997 letter, DISA based their cost estimate on the DoD capital investment threshold of \$100,000 per single computer system. Based on prior experience from migrating 71 information processing centers (59 closed during BRAC 1993 and 12 closed under Defense Management Review Decision 918) to the current 16 megacenters; DISA further estimated that site preparation costs would be well within the established DoD capital investment threshold of \$100,000.

Audit Results. The issue raised by Senator Harkin's office regarding "without additional investment" costs of \$100,000 are *not* part of the criteria, which addresses "no additional investment" for conditioned space. DISA was referring to megacenter capital investments that would be incurred as a result of site preparation costs, including the procurement or relocation of additional computer hardware, because of workload consolidation.

## Issue 5. Chilled water pipe and electrical equipment was not available in large segments of DMC Oklahoma City.

Senator Harkin's office requested that an engineer visit DMC Oklahoma City. The engineer questioned chilled water and electrical equipment capabilities and associated costs to improve designated space at the megacenter. The office stated that:

A qualified engineer went to Oklahoma City and discovered that chiller [chilled water] pipe and electrical equipment was not available in large segments of the designated space. And, even if the \$100,000 definition of cost was acceptable, which we question, it still could not be met. He [the engineer] also indicates that the time requirement for installation would be considerable.

Audit Results. As addressed in issue 3, chilling equipment (provisions for chilled water) was a BRAC 1993 criteria for conditioned space. However, this requirement was eliminated in Section 4.1, Paragraph 3, "Ranking Weights," of the SMART plan. Accompanied by DMC Oklahoma City facilities personnel and the commercial contractors who directed the electrical and mechanical aspects of the construction of building 3900, we confirmed that electrical equipment was available throughout building 3900, including the 11,578 square foot area currently being used by office personnel. As discussed in issue 1, sufficient air conditioning and electrical requirements are available in building 3900.

As addressed in issue 4, investment costs of \$100,000 are not part of the criteria, which addresses "no additional investment" for conditioned space. The only installation time expended would involve connecting existing power distribution units in the 11,578 square feet of space currently occupied by office personnel. As stated in issue 3, the Inspector General, DoD staff, including an electrical engineer, visually verified 19 power distribution units physically located in building 3900. The power distribution units can be moved and connected by Tinker Air Force Base facilities personnel under the interservice support agreement. Therefore, DMC Oklahoma City would not incur any cost to have the power distribution units moved and connected wherever needed in building 3900.

## Issue 6. Consideration of contiguous space.

Senator Harkin's office was concerned that "We also question if certain space at Oklahoma City meets the contiguous requirement."

Criteria for Contiguous Space. The SMART plan, Section 4.1, "Site Selection Measures and Ranking Process," Paragraph 2.1, "Facilities Measures," defines contiguous space as "a subset of conditioned space; a contiguous raised floor segment (either horizontal or vertical) within the conditioned space measured in square feet." Realizing that contiguous space has no megacenter value if the space only physically abuts, DISA clarified the definition of contiguous space to include conditioned space that is either horizontally or vertically connected with electrical and computer data capabilities.

Audit Results. Office personnel, that occupy the conditioned space in question, are located in the east wing of building 3900. As stated in issue 1, the Inspector General, DoD engineer verified the existence of nine 4-inch conduits connecting the east and west wings of building 3900, by reviewing the conduit runs on the floor plan and visually inspecting the conduit run terminations as follows:

- three 4-inch diameter conduits originating from room 147 located in the west wing, installed horizontally, and terminating in room 103 located in the east wing;
- three 4-inch conduits originating in the Systems Management Center, room 237, located in the west wing, installed vertically, and terminating in the electrical/data closet, room 138, located in the east wing; and
- three 4-inch conduits originating in the input/output area, room 140, located in the west wing, installed horizontally, and terminating in the data/electrical closet, room 138, located in the east wing.

Both the east wing and the Systems Management Center are electrically connected to the main computer room and are contiguous. See Appendix G for the Inspector General, DoD engineering analysis for DMC Oklahoma City. In addition, Brown and Root, Inc., categorized the space in question as contiguous space in the 1994 "Facility Baseline Survey."

## Issue 7. Reiteration of chilled water requirements at megacenters.

Senator Harkin's office reiterated the concern for chiller (chilled) water requirements. The office stated that:

DISA has countered that new types of computer equipment does not require chiller [chilled] water. Some have questioned the availability of such equipment. We believe that the electrical support for such computer equipment is not available. But, in any case, DISA should be held to the criteria that was supposed to be used to judge the space at all facilities that was in place when Brown and Root conducted their analysis. Clearly, chiller [chilled] water was a requirement at that time.

Audit Results. To reiterate our results addressed in issues 3 and 5, chilled water is not a criterion for conditioned space. The DISA Western Hemisphere, DISA Support Activity - Denver, reviewed policy on the procurement of computer mainframes that require water-cooling. Although no written policy existed, the DISA Support Activity - Denver stated that "no water-cooled central processing units have been purchased from a manufacturer since January 1995. In addition, DISA does not have any future water-cooled central processing unit acquisitions planned."

We obtained the Brown and Root, Incorporated, "Facility Baseline Survey," dated July 7, 1994. The survey measured air conditioning requirements in BTUs, but the survey did not measure the availability or capacity of chilled water because chilled water was not a criteria for ranking the megacenters in the SMART plan or the Brown and Root, Incorporated, "Facility Baseline Survey."

### Issue 8. Utilization and ranking of space at megacenters.

Senator Harkin's office final issue involving DMC Oklahoma City stated:

That DISA does not have plans to use the space for computers at this time is not relevant. The criteria requires that space meet the requirement for being available for use under the criteria. And, clearly, under the criteria, so the appropriate space should be downgraded. We believe the downgrading should be to the levels indicated in Gary Lenhart's engineering report. It indicates that the cost of upgrading all of the so called conditioned space to a level comparable to the computer now used space is \$2 million. And, that specific areas could not be upgraded for use by a single mainframe for under \$100,000.

Audit Results. The quantity of conditioned space is a criterion for all megacenters in the SMART plan. The SMART plan does not distinguish between conditioned space that is being used for computer operations versus conditioned space that is being used for other than computer operations.

Per the referenced engineering report, the engineer suggested that 25,939 square feet of the 65,137 square feet of conditioned space should be downgraded to 14,361 square feet of easily convertible space and 11,578 square feet of other convertible space. The 14,361 square feet, comprised of three areas (the Field Engineering Division, the Computer Operations, and the Systems Management Center) is conditioned space. These are the areas that the engineer suggested be downgraded to easily convertible space. The engineer contended that all three areas in question did not maintain chilled water availability. Again, the chilled water requirement was eliminated in Section 4.1, Paragraph 3, "Ranking Weights," of the SMART plan. We verified that the three areas totaling 14,361 square feet met all the criteria for conditioned space. In addition, we verified that the 11,578 square feet that the engineer suggested be downgraded to other convertible space is conditioned space. Our verification of the 11,578 square feet of conditioned space that the engineer questioned is addressed in issues 1, 2, 3, 5, and 6.

The engineer's cost estimate to upgrade the conditioned space in question is \$2 million. The \$2 million cost estimate is comprised of \$1.4 million to install chilled water, \$200,000 to seal concrete subfloors under raised floors, and \$400,000 to install additional power distribution units.

- As previously mentioned, the chilled water requirement is not a criteria to rank the megacenters in the SMART plan. Therefore, the \$1.4 million estimate to install chilled water is unsubstantiated.
- We determined that the \$200,000 estimate to seal concrete subfloors under raised floors at DMC Oklahoma City was not warranted. We obtained engineering designs and diagrams, which confirmed that the subfloors in question were properly sealed. The general contractor for building 3900, Buckner and Moore, Incorporated, Moore, Oklahoma, confirmed that they applied a curing compound/hardener/sealer during construction of building 3900. See Appendix H for the March 3, 1998 letter from Buckner and Moore, Incorporated, confirming that they used the material called Conspec21, which is applied when the concrete

is finished. The sealer provides a moisture barrier consistent with specifications for megacenter subfloors when this building was constructed in 1994. See Appendix I for a cross-section drawing depicting the application and location of the concrete sealant and vapor barrier.

• The \$400,000 estimate to purchase and install additional power distribution units is not necessary. As stated in issue 3, an Inspector General, DoD electrical engineer verified the 19 power distribution units physically located in building 3900. Sixteen of the 19 are currently installed and in use. The remaining three power distribution units can be relocated wherever needed in building 3900, including the east wing. DMC facility personnel stated that moving and connecting the power distribution units is covered under the interservice support agreement with Tinker Air Force Base. Therefore, DISA would not incur any additional cost to move and connect the power distribution units.

We verified that the total 65,137 square feet of conditioned space (per the engineer's report) met the criteria established in the SMART plan for conditioned space. In addition, we do not agree with the \$2 million estimate to install chilled water; seal subfloors under the raised floors; and purchase and install additional power distribution units.

## Issue 9. Space at DMC Ogden should not be included as DISA space.

Senator Harkin's office was concerned that "Space at Ogden which is not occupied by DISA should not be counted. It is occupied by the 75th Communications Squadron and the Air Force Materials [Material] Systems Group."

Limitations on Convertible Space. The SMART plan, Section 4.1, "Site Selection Measures and Ranking Process," Paragraph 2.1, "Facilities Measures," provides additional limitations on convertible space. DISA convertible space must be space that is part of the main DMC building and the space must be currently paid for by the DMC.

Audit Results. We toured the facility at DMC Ogden and verified that the DMC facility, building 891, has 142,793 square feet of space. DMC Ogden entered into an interservice support agreement, dated October 1, 1997, with Ogden Air Logistics Center, Hill Air Force Base, Utah, which outlined for building 891 the priority of space for building occupants and the types of support to be provided. Appendix J, pages 1 and 2, shows the types of support provided to DMC Ogden by the Ogden Air Logistics Center. See Appendix J, page 3, for a selected excerpt from the interservice support agreement that states that DMC Ogden, as the primary occupant of building 891, will have priority for space assignments over other building occupants. In addition, a May 13, 1998 DMC Ogden memorandum stated that DMC Ogden sublets a portion of the building to the 75th Communications Group and the Material Systems Group.

A memorandum from the Facilities Manager of building 891 to the Hill Air Force Base, Facility Engineering (Appendix K), lists the percentage of utility costs to be billed to DMC Ogden, the 75th Communications Squadron, and the Material Systems Group based on the percentage of space occupied by each activity. We verified the percentage of space, as shown in Appendix K, that is occupied by DMC Ogden and the two Air Force activities in building 891 as follows:

DMC Ogden
75th Communications Squadron
Material Systems Group

Total

66.96% (95,611 square feet)
25.41% (36,288 square feet)
7.63% (10,894 square feet)
100% (142,793 square feet)

We obtained a March 1998 memorandum from the Vice Commander, Ogden Air Logistics Center, Hill Air Force Base, regarding the primary occupancy of building 891 (See Appendix L). The memorandum mandates that DMC Ogden is the primary occupant of building 891 and has priority on any building 891 space requirements. The fact that DMC Ogden is the primary occupant of building 891 and has priority on any space requirements is reiterated in the interservice support agreement between DMC Ogden and Ogden Air Logistics Center, October 1, 1997. The space in building 891 that is not being occupied by the megacenter can be vacated within 30 days for the megacenter's use, should future needs arise. Therefore, the counted space in building 891 meets the SMART plan requirements for DISA space at DMC Ogden.

## Issue 10. Space at DMC Columbus that is not occupied by the megacenter should not be counted.

Senator Harkin's office was concerned that "At Columbus, counted space is being used by the Regional Control Center, not the DMC and should not be counted."

Audit Results. The Regional Control Center was renamed the Regional Operations and Security Center (ROSC) in August 1997 by the Director, DISA. The ROSC at the DMC Columbus is assigned 13,882 square feet of the total 70,820 square feet occupied by the megacenter. This space was included in the total usable space occupied by the megacenter. The ROSC at DMC Columbus is part of the megacenter operations and reports to the Commander, DISA Support Activity - Columbus, as shown in the undated DISA Support Activity - Columbus organization chart (Appendix M).

We obtained the mission and functions statement of the ROSC Columbus and the joint table of distribution, which lists all authorized ROSC employees by name, grade, and occupational title. The ROSC operating divisions listed in the joint table of distribution are described in the ROSC mission and functions statement as part of DMC Columbus. Appendix N, page 2, is the portion of the ROSC Columbus mission and functions statement, which states that ROSC Columbus is aligned under the DISA Support Activity - Columbus within DISA Western Hemisphere, and interacts with mission responsibilities of DMC Columbus. Space occupied by the ROSC is part of the total usable space to be considered as DMC Columbus space and was properly counted as DMC Columbus space.

### Issue 11. Space not counted at DMC Rock Island.

Senator Harkin's office was concerned that:

If for reasons not apparent to us, these spaces are counted, similar space at Rock Island should be counted. The types of agreements being used to justify the space used at these two sites [Ogden and Columbus] is, we are told, in place at Rock Island. Consistency should demand the counting of 280,000 square feet of space at Rock Island as total available space.

Limitations on Convertible Space. As stated in issue 9, the SMART plan, Section 4.1, "Site Selection Measures and Ranking Process," Paragraph 2.1, "Facilities Measures," provides additional limitations on convertible space. DISA convertible space must be space that is part of the main DMC building and the space must be currently paid for by the DMC.

Audit Results. DMC Rock Island entered into an interservice support agreement with Rock Island Arsenal, dated October 1, 1996, which shows that 130,088 square feet is occupied by the megacenter in building 350. See Appendix O for a copy of selected excerpts of the interservice support agreement between DMC Rock Island and Rock Island Arsenal.

A memorandum from the Commanding Officer, Rock Island Arsenal, to the Director, Defense Information Technology Services Organization (currently DISA), January 22, 1993, states that building 350 has 220,000 square feet of additional space that could be reserved for DMC Rock Island within 1 year (See Appendix P). Although Senator Harkin's office questioned the counting of 280,000 square feet of additional space at DMC Rock Island, there is only 220,000 square feet of space in building 350 available per the memorandum.

Unlike DMCs Ogden and Columbus, DMC Rock Island currently does not control the use of, nor does it pay for, the additional 220,000 square feet of space. The interservice support agreement shows that DISA reimburses Rock Island Arsenal for costs associated with 130,088 square feet of space. Therefore, the 220,000 square feet of space in question should not be counted as convertible space for DMC Rock Island.

### Issue 12. Space at Rock Island was underrated.

Senator Harkin's office was concerned that:

Space at Rock Island is underrated. 6,600 feet System Management Space excluded at Rock Island should be counted given that similar types of space were counted at Oklahoma City. Given the criteria explanations for cost of conversion and 3800 sq. feet of disallowance of space at Rock Island because it had staff working sites on it, we believe that space at Rock Island should be upgraded.

Criteria for Conditioned Space. The SMART plan, Section 4.1, "Site Selection Measures and Ranking Process," Paragraph 2.1, "Facilities Measures," defines convertible space as space where an 18-inch raised floor can be installed with a minimum floor-to-ceiling height of 7.5 feet without structural changes.

Audit Results. We determined that 5,662 square feet of space was assigned to the Systems Management Center in room 225 at DMC Rock Island. The space had a 4-inch raised floor and the space between the raised floor and the dropped ceiling measured only 8 feet, for a total of 8 feet 4 inches from the concrete floor to the dropped ceiling. Per the SMART plan, the space between the concrete floor and the dropped ceiling should be 9 feet to be counted as convertible space. Raising the floor to 18 inches and raising the dropped ceiling so that there is a 7.5 foot area between the raised floor and the ceiling would require the rework on air conditioning ducts, fire protection system, and electrical lighting. This would require structural changes to the existing area in question. Therefore, room 225 does not meet the SMART plan criteria for convertible space.

### Issue 13. Erroneous data regarding disaster vulnerability.

Senator Harkin's office was concerned that "Erroneous data was used regarding disaster vulnerability. DISA data shows no federally declared disasters at St. Louis. We believe the number is, in fact, 14. It appears that the data for St. Cloud Minn., may have been transposed. That should be corrected."

Criteria for Disaster Vulnerability. DISA used the "National Processing Services Location Survey," October 1994, a study obtained from FEMA, which ranked standard metropolitan statistical areas in accordance with a derived scale of disaster vulnerability. The study incorporated the degree of exposure to various hazards at the metropolitan area level.

Audit Results. We compared the disaster vulnerability composite score in the FEMA study to the score DISA incorporated in the SMART plan for each of the six megacenters we reviewed. We verified that the St. Louis disaster vulnerability score of 2237.4, as reflected in the FEMA study, was correctly input into the SMART plan.

We contacted FEMA and questioned whether a transposition error could have occurred for the disaster vulnerability scores for St. Louis and St. Cloud. FEMA officials advised us that, due to the lack of backup data, they could not verify whether an error had or had not occurred. Therefore, we requested that, as a test, DISA incorporate the St. Cloud disaster vulnerability score in place of the St. Louis disaster vulnerability score and recompute the megacenter ranking to determine if a transposition error would have impacted the ranking. DISA recomputed the megacenter ranking according to that scenario. The ranking of the top five megacenters remained the same, and DMC Rock Island remained the sixth ranked megacenter. Therefore, we believe this issue is moot.

## Appendix D. Glossary of SMART Plan Criteria

Section 4.1, "Site Selection Measures and Ranking Process," Paragraphs 2.1, 2.2, and 2.3 of the SMART plan defines the 12 criteria as follows:

<u>Usable Space</u> - a measure of the total space available in the primary Megacenter facility for installation of mainframe computer equipment; measured in square feet. Usable space will be calculated by adding the primary facility values for conditioned space, easily convertible space and other convertible space.

<u>Conditioned Space</u> - a subset of the usable space, defined above, which is immediately available for installation of computer hardware requiring a controlled environment; measured in square feet. As a minimum, such space provides a controlled environment and a raised floor air conditioning plenum 18 inches or higher above the subfloor with provisions for air conditioning and power cable distribution with no additional investment.

<u>Convertible Space</u> - a subset of usable space, defined above, which may be converted to conditioned space; measured in square feet. Convertible space is further defined as:

- space where an 18-inch raised floor can be installed with a minimum floor to ceiling height of 7.5 feet without structural changes,
- space that has or may have installed a controlled environment without adding to the capacity of the source, and
- space that has or may have added power cable distribution and an adequate source of power.

Convertible space can further be categorized as either easily convertible space or other convertible space.

Easily Convertible Space - convertible space in the primary Megacenter facility which is contiguous to conditioned space, requires little or no demolition, and represents a minor cost for conversion to conditioned space.

Other Convertible Space - convertible space in the primary Megacenter facility that cannot be characterized as easily convertible.

<u>Contiguous Space</u> - a subset of conditioned space; a contiguous raised floor segment (either horizontal or vertical) within the conditioned space defined above; measured in square feet.

<u>Air Conditioning</u> - a measure of the total cooling capacity available in the primary Megacenter facility; measured in British Thermal Units. For reference, one ton equals 12,000 British Thermal Units.

<u>Electrical Service Feed</u> - a measure of the total electrical power available at the service feed of the primary Megacenter facility; measured in kilovolt-amperes. Electrical service feed may be further defined as the total power available at the service feed from the point of conversion to building power at the transformer.

<u>Aggregate Regulated Power</u> - the total, aggregate regulated power irrespective of the present configuration.

<u>Back Up Power</u> - the total electrical power measured in kilovolt-amperes available from stand-alone generators, or other alternative sources, for use in powering the data center when the primary power source fails. Back up power may not include power reported as regulated power.

<u>Locality Pay Percent</u> - the percentage of base pay used to calculate federal locality pay for a specific location and a measure of the cost of labor associated with the operation of the Megacenter, based on the Bureau of Labor Statistics survey of federal versus non-Federal salaries (Locality Pay) for the Metropolitan Statistical Areas where Defense Megacenters are located.

<u>Disaster Vulnerability</u> - a measure of the primary Megacenter facility's exposure to natural disasters such as tornadoes, hurricanes, and earthquakes expressed as a numeric score varying from 3108.6 for the least vulnerable to 44.55 for the most vulnerable Metropolitan Statistical Area. This measurement is based upon historical data compiled by the Federal Emergency Management Agency in a document called "National Processing Services Location Survey."

**Building Condition** - a measure of the primary Megacenter facility's condition based on a professional engineer's on-site assessment of exterior and interior building components, foundations, superstructure, heating, air conditioning, ventilation, plumbing and electrical systems. Building condition will be expressed as a numeric rating from 1 to 9, defined as follows:

- Building building systems or an element within a system that is unsuitable for continued use because of a hazard to life or health resulting from the component.
- Building building systems or an element within a system that is unsuitable for continued use because of inoperability, but not presenting a hazard to life or health.

# Appendix E. Estimate for Preparing East Wing of Building 3900 at DMC Oklahoma City



## DEFENSE INFORMATION SYSTEMS AGENCY WESTERN HEMISPHERE

DEFENSE MEGACENTER OKLAHOMA CITY 8705 INDUSTRIAL BLVD TINKER AIR FORCE BASE, OKLAHOMA 73145-3352

IN REPLY REFER TO: DISA WESTHEM (WEK)

0 4 MAR 1998

MEMORANDUM FOR DEPARTMENT OF DEFENSE INSPECTOR GENERAL ATTENTION: MR. NICK COMO

SUBJECT: Defense Megacenter Oklahoma City Conditioned Floor Space

In response to a DODIG site visit, the following cost estimates were provided to support costing information for preparing the East Wing of Bldg 3900 to install computer equipment.

- 1. In the event the Defense Megacenter Oklahoma City (DMC-OKC) has a requirement to place computer hardware in the area identified as 11,578 sq. ft of Conditioned Space (East Wing, Bldg 3900) to support additional workload requirements, the following implementation plan would be executed. The administrative support personnel located in the affected area would be relocated to additional administrative workspace identified in a portion of Building 1, located on Tinker Air Force Base. This area is readily available for immediate occupancy with the entire required communications infrastructure in place. A portion of Building 1 contains 13,500 sq. ft and is currently assigned to DMC-OKC for its use at no additional cost. The relocation of these personnel would have no impact on DMC-OKC's ability to provide uninterrupted support to its customers.
- 2. DMC-OKC facilities staff would disassemble and remove all furniture modules from the referenced area. Required work is estimated to take four people less than (160m/hrs) total, and would be accomplished during Non-Prime hours of operation (1600-0700). A licensed electrician would be required to disconnect the power from the furniture, IAW with OSHA regulation. The said work is estimated to take less than (40m/hrs @ \$40 per hr).
- 3. Presently there is 625 amp 120/208V 3\$\psi/4W UPS/Generator supported, distributed electrical power available for immediate use in the affected area. If additional computer equipment dictates the requirement for more electrical capacity in the affected area, an additional 800 amps can be made available in less than (8m/hrs @ \$40 per hr). A licensed electrician would perform this work.

4. The total cost for the preparation of the space in question, excluding the work performed by the in-house facilities staff, is estimated at \$1.920.00. The overall estimated time, including in-house staff to accomplish this task, is (208m/hrs).
RUDY M. VINES, Deputy Director Defense Megacenter Oklahoma City

# Appendix F. Mainframe Computer Delivery Lead Times

Storage Tele
INFORMATION FOR ORDERING AGENCIES

#### INFORMATION FOR ORDERING AGENCIES

#### 1. Geographic Scope of Contract

The geographic scope of this contract is the 48 contiguous states (CONUS) and the District of Columbia.

#### 2. Service Areas (See Appendix A)

The monthly maintenance rates for purchased and leased equipment listed herein are applicable to all Government locations within a 50 mile radius of the service points listed in Appendix C.

#### 3. Ordering Address

Orders for CONUS and U.S. Government agencies overseas, conforming with geographic scope as defined in Item I, should be sent to:

Storage Technology Corporation 12200 Tech Road Silver Spring, Maryland 20904-1983 ATTN: Marketing Department

#### 4. Payment Address

Payments by check should be sent to the StorageTek address as listed on the invoice and should contain identifying invoice number(s) and customer number(s) as appears on the invoice. If payment is made by electronic funds transfer, please include identifying customer number and invoice number as appears on invoice.

NOTICE: Agencies are reminded that involces for equipment are not to be paid until formal acceptance of equipment is made in accordance with the applicable Standard of Performance Clause act forth in the LTOP and purchase sections of this ADP Schedule Price List. Earlier payment is a violation of this contract and 31 USC 3324 - Advances of Public Monies. The date of the Treasury check will be considered the date of payment.

#### 5. F.O.B. Point

Delivery lead time StorageTek Corp. Shipping points and prices are F.O.B. Destination for all equipment offered herein. If applicable, shipment of equipment to a location(s) outside the contiguous 48 states shall be made by Government transportation from point of embarkation (or in the case of return shipment, to point of debarkation) specified by the Government. Destination charges for that equipment shall be based on the zone charge in which the point of debarkation or embarkation eccurs.

#### Delivery Time

- A. Delivery will be within 60 days of receipt of a valid order or at a mutually agreeable time after receipt of a valid order.
- B. Oversight and 2-Day Delivery Times. Schedule customers may require overnight or 2-day delivery. The offeror is requested to annotate in its pricelist or by separate attachment the items that can be delivered overnight or within 2 days. Contractors offering such delivery service will be required to state in the FSS pricelist details concerning this service.
- C. Urgent Requirements. When the Federal Supply Schedule contract delivery period does not meet the bona fide urgent delivery requirements of an ordering agency.

3

	AMDAHL GSA SCHEDULE NUMBER GS-35F-0203G
4.	
	Reporting by Government Ordering Offices:
	a. Information for Field Buying Offices to Complete Standard Form 279, Federal Procurement Data System (FPDS) Individual Contract Action Report.
	Block 9: Order/Modification Under Federal Schedule. Block 16: Contractor Establishment Code:
	Amdahl Corporation's Dun and Bradstreet Number is: 06-356-7820 AFSC's Contractor Establishment Code is: 12753915D.
	Block 30: Type of Contractor
	A. Small Disadvantaged Business
	B. Other Small Business
	C. Large Business X  G. Other Nonprofit Organization
	L. Foreign Contractor
	Block 31: Woman-Owned Small Business (No).
	Block 34: Subject to Labor Statutes:
	A. Walsh-Healey Act-Manufacturer (X)
	or  B. Walsh-Healey Act-Dealer (X-Sun).
	Block 36: Contractor's Tax Identification Number (TIN):
	94-1728548 (Amdahl) 94-2724596 (AFSC)
	b. CAGE Code(for DD Form 350):
	9Y247 (Amdahl) 2U667 (AFSC).
5.	F.O.B. Point: Destination for all items except Sun equipment, which is FOB
ry lead	origin
mdahl 6.	Delivery Time: 30 days after receipt of order or as negotiated between the Ordering Office and the Contractor. In no case shall delivery time exceed 180 days
(	after receipt of order. Amdahl further agrees to give priority over all non-
	emergency orders to deliveries for orders which are identified as being in support of disaster recovery for replacement in kind of existing systems that have been
	destroyed, seriously damaged, or otherwise rendered inoperable.
amd	2-2 1/16/97 through 9/30/97

#### VION Corporation GS-35F-4304D

03-25-98

#### INFORMATION FOR ORDERING OFFICES

1. Geographic Scope of Contract.

The geographic scope of the contract is the 48 configurous states, the District of Columbia, and the State of Hawaii.

Contractor's Ordering Address and Payment Information:

VION's Ordering Address:

**ViON Corporation** 

1055 Thomas Jefferson Street, N.W.

Washington, DC 20007

VION's Payment Address:

VION Corporation

1055 Thomas Jefferson Street, N.W.

Washington, DC 20007

Government Commercial Credit Cards will be acceptable for payment. In addition, bank account information for wire transfer payments will be shown on the invoice.

Below are the telephone number(s) that can be used by ordering agencies to obtain technical and/or ordering assistance.

(202) 467-5500

#### 3. RESERVED

4. Statistical Data for Government Ordering Office Completion of Standard Form 278:

Block 9:

G. Order/Modification Under Federal Schedule

Block 16:

Contractor Establishment Code (DUNS):

09-469-5323

Block 30:

Type of Contractor -

B. Other Small Business

Block 31:

Woman-Owned Small Business -

No

Block 34;

RESERVED

Block 36:

Contractor's Taxpayer Identification

EIN 52 1167763

Number (TIN) -

4a. CAGE Code: 2U672

5. FOB

(a)

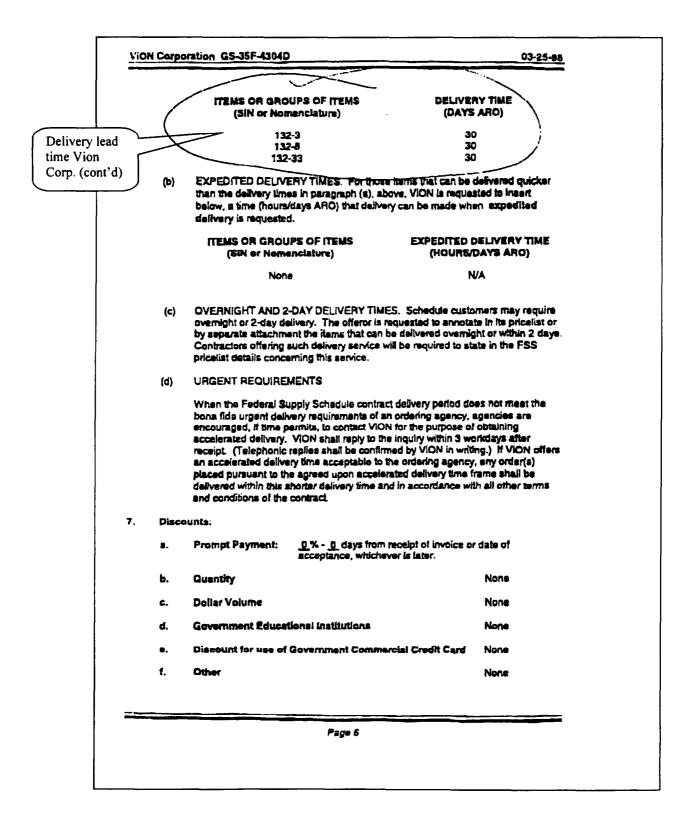
Destination

6. COMMERCIAL DELIVERY SCHEDULE (MULTIPLE AWARD SCHEDULES)

Delivery lead time Vion Corp.

TIME OF DELIVERY. VION shall deliver to destination within the number of calendar days after receipt of order (ARO), as set forth below. VION shall insert in the "time of Delivery (days ARO)" column in the Schedule of items a definite number of calendar days within which delivery will be made. In no case shall the offered delivery time exceed VION's normal commercial practics.

Page 5



#### CHAPTER 2. GENERAL INFORMATION

## 2.1 INFORMATION FOR ORDERING AGENCIES

#### 2.1.1 Geographic Scope of Contract

For all Special Items, the geographic scape of dist Contract is the 48 contiguous States and the Osterict of Columbia. For application to OCONUS locations listed in Appendix B, refer to each Special Item. Equipment subsequently shipped anside of the OCONUS locations listed in Appendix B is not eligible for any support services (including installation, maintenance or warranty service) from IBM under this contract at such locations.

#### 2.1,2 Ordering Address

Orders should be mailed to an IBM Office listed in Appendix A, except as follows:

- Orders Issued under Special Item 132-16 should be mailed to the 18M Parts Order Center, Dept. E54, Post Office Box 9022, Boulder, Colorado 80301-9022.
- Orders for Special tiem 132-43 ADP Classroom
  Training will be accepted by telephone
  (800-426-8322) or by mail to IBM Liducation and
  Training, Customer Service Department, Post Office
  80x 22590, Tueson, Arizona 85734-2590.

#### 2.1.3 Payment Address

Federal agencies should remit payment to one of the following addresses:

IBM Corporation (Germany) Unit #20240 APO AE 09165 ACH Payments: I Penn's Way New Cartle, DE 19700

IBM Corporation P.O Box 7247-0276 Philadelphia, PA 19170

Other authorized users of the GSA Schedule may submit payments to the address as shown on the invoice.

#### 21.4 Size of Business

#### Large

### 2.1.5 DUNS Number, Tax ID Number and CAGE Code

The DUNS number applicable to this contract is: 00-136-1083, IBM's Tax ID number is 13-0871985. The CAGE code for orders placed at 6710 Reckledge Drive, Bethmala, MD is 8W884. Contact the IBM office shown in Appendix A if another location's CAGE code is required.

#### 2.1.6 Shipping PointTransportation

All items are shipped FOB Destination within the United States. For shipment outside the United States see the applicable Special fram. Expedient delivery or special transportation requirements can be provided. Charges for such services are autside the scope of this contract.

#### 2.1.7 Delivery Schedules

All products will be delivered within 180 days from the order receipt date. If the Government wishes a specific receipt installation date, it should be included in the delivery order. If IBM is unable to meet the requested date, IBM will contact the Government to reach agreement for an alternative date.

Acceptance of Delivery Orders for Millennium Conversion Services (132-42) and ADP Services (132-42) is subject to the availability of qualified personnel.

#### 118 Technical or Ordering Assistance

Inquiries from ordering agenties relating to technical information or ordering assistance should be directed to the IRM Office listed in Appendix A, or by calling IBM's Federal Information Call Center on 1-800-333-6705.

#### 2.1.9 50-Cycle Equipment

Refore placing an order for 50-cycle equipment, ordering offices should contact IBM to ensure that such equipment is available.

Delivery lead time IBM Corp.

CHAPTER 2. GENERAL INFORMATION

# Appendix G. Inspector General DoD Engineering Analysis



INSPECTOR GENERAL DEPARTMENT OF DEFENSE 400 ARMY NAVY DRIVE ARLINGTON, VIRGINIA 22202

May 4, 1998

# MEMORANDUM FOR AUDIT PROJECT MANAGER THROUGH TECHNICAL DIRECTOR

SUBJECT: DODIG Engineering Verification Of Audit Of Defense Information Systems Agency Rock Island Megacenter Realignment (Project No. 8CG-5017)

During my site visit to DMC Oklahoma City on April 22-24, 1998, I met with DMC facilities technical staff and management. Additionally, I met with a field engineer and an electrical construction foreman employed by Echols Electric Company and an electric power consultant from Circa Power Inc. The three private company's employees are responsible for the construction and supplemental electrical installations for building 3900. We reviewed provisions for air conditioning and power distribution.

The electrical and air conditioning requirements for the entire building, including the east side, are provided by the Central Plant. Presently, the east side cooling controls are set for personnel occupancy.

We verified the existence of nine 4-inch conduits connecting the east and west areas, by reviewing the conduits runs on the floor plans and visually inspecting the conduit run terminations: three 4-inch diameter conduits originating from (room 147) located in the west side and terminating in (room 103) located in the east side; three additional 4-inch conduits originating in the system management center (room 237) located in the west side and terminating in the electrical/data closet (room 138) located in the east side; and three 4-inch conduits originating in the input/output area (room 140) located in the west side and terminating in the data/electrical closet (room 138) located in the east side. The conduits provide capacity for additional data and power cabling distribution, if required.

We visually verified the 19 Power Distribution Units (PDU) physically located in Building 3900. The PDUs can be relocated wherever needed in Building 3900, including the east side. DMC facility personnel stated that moving and connecting of the PDUs is covered under the base support agreement with the Tinker Air Force Base. Three (3) of the 19 PDUs were not in use.

If you have any additional questions, please call me at (703) 604-8916.

Wei K. Chang

Electronic Engineer

Wei Kur Chang

Technical Assessment Division

# **Appendix H. Memorandum on Concrete Sealant Specifications for DMC Oklahoma City**



## buckner & moore, inc.

GENERAL CONTRACTORS
3 March, 1998

Mike Zesker Logistical Systems Operations Center Tinker AFB, OK

Dear Mike:

Per your inquiry consorning floor slab finishes at the above mentioned project. As I recall, we applied a curing compound/hardener/scaler. I believe that we used a material called Conspec 21 which is applied as you finish the concrete.

I have discussed this with the superintendent on the project, and he seems to recall the same process. If you have any further questions please do not heakate to contact me.

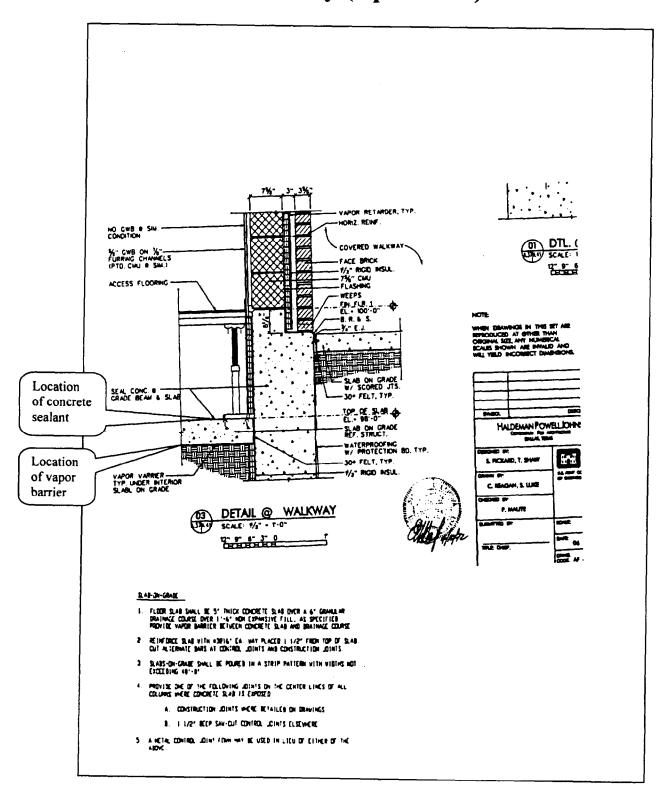
Sincerely,

Steve Buckner

President

P O BOX 6324, MOORE, OKLAHOMA 73153, TELPHONE (405) 794-7785, FAX (405) 793-9246

# Appendix I. Concrete Sealant Specifications for DMC Oklahoma City (April 1992)



# Appendix J. Excerpts from Interservice Support Agreement, DMC Ogden and Hill AFB

		SU	PPORT A	GREEMENT		<i>;</i> {
. AGRETMENT NUMBER Pro-Med by Sampler!	2. SUPERSERED A			3. EFFECTIVE BATE PYTAMOD	4 EXPRATE	III GATE Intellies 7
FB2029-97274-699	FB207	29-95274-0	699	97/10/01		Indelinite
BOPPLYING ACTIVITY			E. MECLAYING ACTIVITY			
n. Name and Addition Conter Ogden Air Logistics Center ATTN: 75 ABW/XP 7285 4th Street Hill Air Force Base, UT 84056-5206			L HAME MID ADMESS Defense Megacenter Ogden 7879 Wardleigh Road Hill Air Force Base UT 84056-5997			
MAMMCS ROLLING				B. MAJOR COMMARS		
AFMC				DISA		
SUPPORT PROVIDED BY SUPPLIER				N. BASIS FOR REMAURSEMENT	. ESTIMATE	D REIMOURSEWENT
Administrative Services				See Aich 5	See Atc	
	<b>0</b>			See Aich 5	See Alc	1
Audio and Visual Information						1
Automated Data Processing/A	utomation Serv	ices		See Atch 5	See Atc	c a
Chaplain Services				No Reimbursement	No Rein	nbursement
Civilian Personnel Services				See Atch 5	See Au	h 5
Clubs				No Reimbursement	No Reir	nbursement
mmand Support				No Reimbursement	No Rein	nbursement
Common Use Facility Operati	ons, Maintenan	ce, Repair	and	No Reimbursement	No Reir	nbursement
Communication Services				See Atch 5	See Alc	h 5
Community Services				No Reimbursement	No Reir	nbursement
Custodial Services				See Atch 5	Sec Atc	h 5
Disaster Preparedness				No Reimbursement	No Reir	nbursement
ABOUTIONAL SUPPORT REQUIREMENTS ATTAC	<b>if</b> i:	ΓX	YES	100	1	
SUPPLYING COMPREENT	1 1			1. RECEIVING COMPONENT		
COMPTHONES SENATURE		I. MIE S	4940	A COMPTROLICA SIGNATURE		b BATE SIGNED
Jun Halter	-	19 Ma	ar 98	15/15/	nell	19 Mar 98
APPROPRIE AUTHORITY				L APPROVAGE AUTRORITY		
Y Typed Name				(1) Typed Name	N OUC:	HEAC
LARRY O. SPENCER, CO				ALFRED H. WHITLEY, CO	ILUNEL,	
Dymuse To Agus CC	a	Taluphan Hard		DEFENSE MEGACENTER OF	OFN	(3 Talaphana Revolut
75 ABW/CC	ا ،	B01-777	-2191	Hill AFB UT B4056-599	37	7-2951
Hill AFB UT 84056-52	VO 1 2	10 Gete 2		Minimary Of D4030-332		(S) Date Signal
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		ı		Į.		ı

#### **SUPPORT AGREEMENT F82029-97274-699**

#### BLOCK 7, SUPPORT PROVIDED BY SUPPLIER, CONTINUED:

SUPPORT	Basis for Reimbursement	estimated Reimbursement
Education Services	See Atch 5	See Atch 5
Entomology Services	See Atch 5	See Atch 5
Environmental Cleanup	See Atch 5	See Atch 5
Environmental Compliance	No Reimbursement	No Reimbursement
Facility Construction and Major Repair	See Atch 5	See Atch 5
Facility Maintenance and Minor Repair	See Atch 5	See Atch 5
Finance and Accounting	No Reimbursement	No Reimbursement
Fire Protection	No Reimbursement	No Reimbursement
Food Service	No Reimbursement	No Reimbursement
Health Services	No Reimbursement	No Reimbursement
Housing and Lodging Services	No Reimbursement	No Reimbursement
Intelligence Support	See Aich 5	See Aich 5
Laundry and Dry Cleaning	No Reimbursement	No Reimbursement
Legal Services	No Reimbursement	No Reimbursement
Mail Service	No Reimbursement	No Reimbursement
Mail Postage Service	Sec Atch 5	See Aich 5
Military Personnel Support	No Reinaborsement	No Reimbursement
Morale, Welfare and Recreation (MWR) Activities	No Reimbursement	No Reimbursement
Mortuary Services	No Reimbursement	No Reimbursement
Occupational and Industrial Health Services	See Atch 5	See Atch 5
Police Services	No Reimbursement	No Reimbursement
Public Affairs	No Reimbursement	No Reimbursement

	11. GENERAL PROVISIONS (Complete blank speces and add additional powers) provisions as appropriate: e.g. arcupaines to printed provisions and followed parties in this approvement, hilling and reliaboraments facilities than 1						
	The receiving components will provide the supplying companent projections of requested support. (Significant changes in the meaning component's support requirements about to submitted to the supplying component in a minute that well provide simply amplification of resource requirements.)						
	b. It to the responsibility of the supplying component to bring any required or requested change in support to the effection of  DISA-WEG12, 7879 Wardleigh Road, Hill AFB UT 84056-5997  print to changing or executing support.						
	c. The perspecent prevising relembershife Report in this represent will submit statements of casts tax DISA-WEG12, 7879 Wardleigh Road, Hill AFB UT 84056-5997						
	d. All retes expressing the self cost of services grovided in this argenerant are based on curson rates which may be subject to change for uncontrollable measure, such as legislation, BoD directives, and commercial vidity rate increases. The receives will be notified invendently of such rate changes that must be passed through to the support receives.						
i	g. This agreement may be conceiled at any time by marted consent of the parties concerned. This agreement may also be conceiled by either party upon giving at least 180 days written notice to the other party.						
	f. In east of mahiluntion or other processory, this agreement will retain in force only within supplier's capebilities.						
	g. Receiver Authorized Strength: Officers - 1 (USAF); Enlisted - 3 (USAF); Civilian - 274. Total: 278.						
	h. Unique Receiver requirements above the standard level of support are subject to negotiation and reimbursement.						
	i. Support and cost basis changes 15 percent or greater must be submitted to the agreement approving authorities.						
	j. This agreement will be reviewed triemially at least 120 days prior to the anniversary of the effective date (Block 3).						
	k. Receiver will provide annual DD Forms 448, Military Interdepartmental Purchase Requests (MIPRs) as follows. MIPR allocation will be broken out by category of support.						
	(1) MIPR to OO-ALC/TIEPR, marked for 75 CEG/CERS, for Entomology, Facility Construction and Major Repair, Lility Maintenance and Minor Repair and Refuse Collection. Costs for these categories will be billed monthly based on actual charges with the exception of contract costs which will be billed at the beginning of the fiscal year.  (2) MIPR to OO-ALC/TIEPR, marked for OO-ALC/FMBAO, for Civilian Personnel (including EEO), Communication Services (basic telephone service) and Custodial Services. Costs will be billed one-fourth per quarter with the exception of						
	contract costs which will be billed at the beginning of the fiscal year.						
	ADDITIONAL GENERAL PROVISIONS ATTACHED: X YES NO						
	12. SPECIFIC PROVISIONS for aggregates: s.g., locopie and site of accepted facilities, unique supplier and receiver responsibilities.  annifolate, requirements, quality standards, and catenia for measurement of unique requirements.)						
xcerpt- MC Ogder primary	FACILITIES ASSIGNED: Bidg 100 - 7,200 sq ft Bidg 800 - 6,000 sq ft Bide 880 - 1,248 sq ft						
cupant	TOTAL 110,982 sq ft						
	The host installation will retain ownership of Building 891 which DISA occupies. However, DISA as the primary occupant of Building 891 will have priority for space assignments over other building occupants.						
	See Attachment 1 for Specific Provisions.						
	ADDITIONAL SPECIFIC PROVISIONS ATTACHED:						
ľ	OD FORM 1144, MAR 92 (Bock) (FFVI) FWOM FAST						

# Appendix K. Percentage of Utility Costs Paid by Tenants of Building 891 at DMC Ogden

#### DEFENSE INFORMATION SYSTEMS AGENCY

DEFENSE MEGACENTER OGDEN 7979 WARDLEIGH ROAD HILL AIR FORCE BASE, UTAM 34056-5997



M REPLY

WEG11

TO

75 CES/CEZ

SUBJECT

Space Being Utilized by Organizations Located in Building 891

- 1. Listed below is the space in square footage being utilized by each of the organizations within Building 891. The calculations used to determine organizational responsibilities was based on the total office/computer space available subtracted from the total space available to determine total common use space. The common use square footage is directly proportionate to the percentage of office/computer space being utilized by an organization.
- 2. Request You update real-estate records for Building S91 to reflect Square footage and percentage of use as listed below for Defense Information Systems Agency (DISA), 75 Communications Squadron (75th CS), and Material Systems Group (MSG/SO). Future utilities should be billed in accordance with these numbers

BLDG 891: 100%	DISA: 66.96%
Total available space 142,792	Office 78,657
Total ofc/comp 117,473	Common. <u>16.954</u>
Total common use 25,319	DISA total 95,611
75th CS: 25.41%	MSG/SO: 7.63%
Office 29,854	Office. \$.962
Common <u>6,434</u>	Common <u>1,932</u>
SC total 36,288	MSG total 10.894

3. If you have any questions regarding this correspondence, please contact Ralph Pettit, DSN 777-5995.

Srule Houst
BRUCE FOUST
Facilities Manager

# Appendix L. Memorandum Regarding Primary Occupancy of Building 891 at DMC Ogden



#### DEPARTMENT OF THE AIR FORCE HEADQUARTERS OGDEN AIR LOGISTICS CENTER (AFMC) HILL AIR FORCE BASE, UTAH

23 March 1998

MEMORANDUM FOR SEE DISTRIBUTION

FROM: OO-ALC/CV

SUBJECT: Primary Occupancy for Building 891

- 1. This memorandum is to identify Defense Megacenter (DMC) Ogden as the primary occupant for Building 891.
- 2. DMC Ogden is a significant contributor to the efficiency and viability of the Ogden Air Logistics Center. As a tenant, they occupy Building 891. This building is a special purpose facility consisting of raised flooring, compartmentalization, and trenching for large scale computer operations. It has the security, backup power, and other utilities needed for a first-rate computing facility. As a result, I am designating DMC Ogden as the primary occupant of Building 891, giving them priority on any Building 891 space requirements.
- 3. All space requirements will continue to be handled through our current process administered by OO-ALC/NP.

THOMAS A. O'RIORDAN, Brig Gen. USAF Vice Commander

DISTRIBUTION: OO-ALC/FM/XP 75ABW/CC/SC 75SPTG/CC 75CEG/CC MSG/SO DISA/WEG

# Appendix N. Mission and Functions Statement for ROSC Columbus

DISA SUPPORT ACTIVITY-COLUMBUS
REGIONAL OPERATIONS AND SECURITY
CENTER (ROSC)



VISITOR INFORMATION
AND
ORGANIZATION OVERVIEW

Welcome to the Regional Operations and Security Center-Columbus Overview and thank you for taking the time to review these materials.

ROSC-C Vision Statement. Our Vision Statement for the Regional Operations and Security Center - Columbus (ROSC-C) is as follows:

"To be a Worldclass Network Service Provider, responsive to customer needs, while delivering quality combat support to the Warfighter."

ROSC-C Motto. Our Motto is as follows:

"Excellence in Network Services."

Alignment of ROSC Columbus within DISA

Our organization is highly motivated and committed to accomplishing our Vision and honoring the concept and philosophies of our Motto. The Warfighter is the ultimate beneficiary of our efforts.

#### 1. Introduction of Organization, Mission and Functions:

The ROSC-C is aligned under the Defense Information Systems Agency Support Activity - Columbus (DSA-C) within the Western Hemisphere (WESTHEM) environment. The DSA-C, commanded by COL Douglas Beaty, includes Megacenter, Regional Services, Business Management and Security Divisions that, while having unique mission responsibilities, closely interact with the ROSC-C. The ROSC-C is structured into four Divisions. Each Division is assigned specific responsibilities and contributes in a variety of ways in support of the Directorate and the Command. The Divisions and their major AOR's are as follows:

Network Services. Project Management, Planning and Wide Area Network Activation.

Network Integration. Network Design and Implementation, Configuration and Performance Management.

Network Operations. First and Second Level Fault Management, Resolution and Reporting. Global Operations and Security Center (GOSC) and Service/Agency interface.

Appendix O. Excerpts from Interservice Support Agreement, DMC Rock Island and Rock Island Arsenal

(PROVIDED BY SUPPLIER)	2. SUPERSEDED AGREEME NO. (IF APPLICABLE)	13. EFFECTIVE DATE (YYMMDD)	4. EXPIRATION DATE (MAY BE "INDEFINITE")	
W52H1B-121	MEDIAD 02406 424	961001	Indefinite	
evision 1 SUPPLYING ACTIVITY	W52H1B-93106-121	6. RECEIVING ACTIVITY	Indennite	
a. NAME AND ADDRES	38	a NAME AND ADDRES	SS	
Commander	<b></b>	Director	-	
Rock Island Arsenal		Defense Megacenter Ro	ck Island	
ATTN: SIORI-RM		ATTN: WER		
		Rock Island, IL 61299-7560		
b. MAJOR COMMAND		b. MAJOR COMMAND		
AMC	(0)1001450			
7. SUPPORT PROVIDED BY		b. BASIS FOR REIMBURSEMENT	c REIMBURSEMENT	
SUPPORT (Specify what, when, it	r nere, and now mochy	C. DASIS FOR REMODRISCHEIT		
See attached block 7. for F)	197 information.	See attached block 7.	Fixed Price: \$ 2,512,051	
ADDITIONAL SUPPORT RE	QUIREMENTS ATTACHED:	YES (X) NO ( )		
8. SUPPLYING COMPONEN' COMPTROLLER SIGNATURE	D. DATE SIGNED	RECEIVING COMPONENT     COMPTROLLER SIGNATURE		
COMPTROLLER SIGNATURE	b. DATE SIGNED			
COMPTROLLER SIGNATURE SUZANNE WELLS, Dire	b. DATE SIGNED			
COMPTROLLER SIGNATURE SUZANNE WELLS, Dire	b. DATE SIGNED	a. COMPTROLLER SIGNATURE  c. APPROVING AUTHORITY		
COMPTROLLER SIGNATURE SUZANNE WELLS, Dire C. APPROVING AUTHORITY (1) Typed name	b. DATE SIGNED	a. COMPTROLLER SIGNATURE		
COMPTROLLER SIGNATURE SUZANNE WELLS, Dire C. APPROVING AUTHORITY (1) Typed name STEVEN L. ROOP	b. DATE SIGNED	a. COMPTROLLER SIGNATURE  c. APPROVING AUTHORITY		
SUZANNE WELLS, Director of the company of the compa	b. DATE SIGNED	a. COMPTROLLER SIGNATURE  c. APPROVING AUTHORITY		
SUZANNE WELLS, Director of the company of the compa	b. DATE SIGNED	a. COMPTROLLER SIGNATURE  c. APPROVING AUTHORITY		
SUZANNE WELLS, Direct APPROVING AUTHORITY (1) Typed name STEVEN L. ROOP Colonel, OrdC Commanding (2) Organization	b DATE SIGNED ector of Resource Mgt	a. COMPTROLLER SIGNATURE  c. APPROVING AUTHORITY  (1) Typed name	b. DATE SIGNED	
SUZANNE WELLS, Direct APPROVING AUTHORITY (1) Typed name STEVEN L. ROOP Colonel, OrdC Commanding (2) Organization  Rock Island Arsenal	b DATE SIGNED ector of Resource Mgt  (3) Telephone Number	a. COMPTROLLER SIGNATURE  c. APPROVING AUTHORITY  (1) Typed name	b. DATE SIGNED	
COMPTROLLER SIGNATURE SUZANNE WELLS, Director of the control of th	b DATE SIGNED ector of Resource Mgt  (3) Telephone Number  DSN: 793-6035	a. COMPTROLLER SIGNATURE  c. APPROVING AUTHORITY  (1) Typed name  (2) Organization	b. DATE SIGNED  (3) Telephone Number	
SUZANNE WELLS, Direct APPROVING AUTHORITY (1) Typed name STEVEN L. ROOP Colonel, OrdC Commanding (2) Organization  Rock Island Arsenal (4) Signature	b DATE SIGNED ector of Resource Mgt  (3) Telephone Number  DSN: 793-6035	a. COMPTROLLER SIGNATURE  c. APPROVING AUTHORITY  (1) Typed name  (2) Organization	b. DATE SIGNED  (3) Telephone Number	
SUZANNE WELLS, Director of the company of the compa	b. DATE SIGNED sector of Resource Mgt  (3) Telephone Number  DSN: 793-6035 (5) Date Signed  (Complete only when agreement is	a. COMPTROLLER SIGNATURE  c. APPROVING AUTHORITY  (1) Typed name  (2) Organization  (4) Signature	b. DATE SIGNED  (3) Telephone Number  (5) Date Signed	

Total square footage assigned to DMC Rock Island

FOR ISA NUMBER: W52H1B-121, Revision 1

CUSTOMER: DMG	DMC
---------------	-----

AMS		BASIS FOR	TOTAL	LINE	FY 97
CODE	TYPE OF SUPPORT	REIMBURSEMENT	LUNITS	TOTAL	COST
438879.S	S4. UTILITIES		-   1/		\$1,402,164
	Administrative	Square feet assigned	96,427	\$199,604	
	Administrative - Special services Bldg 350	Square feet assigned (computer rooms)	33,661	\$1,115,526	
	Air conditioning	Square feet assigned	880,081	\$84,557	
	Storage - heated	Square feet assigned	799	\$919	
	Storage - unheated	Square feet assigned	11,133	\$1,559	
438896.D	SS. VEHICLE OPERATIONS/MAINT				\$4,596
	Vehicle maintenance	Hours serviced	8.0	\$884	
	Vehicle operations	Operation hours of vehicle	29.7	\$3,712	
	GRAND TOTAL - FY 97			\$2,512,051	\$2,512,051

# Appendix P. Memorandum Regarding Space at DMC Rock Island



DEPARTMENT OF THE ARMY
ROCK ISLAND ARSENAL
ROCK ISLAND, ILLINOIS 61299-5000



ATTENTION O

SMCRI-CO (405-10a)

2 2 JAN 1993

HEHORANDUM FOR Director, Defense Information Technology Services Organization, ATTN: Mr. Clyde E. Jeffcoat, 6760 E. Irvington Place, Denver, Colorado 80279-1000

SUBJECT: 'Physical Space at Rock Island Arsenal

- 1. On 19 January 1993, a Department of Defense (DOD) Data Center Consolidation Planning team met with Mr. Fred Dearborn, my Civilian Executive Assistant. The team was visiting Rock Island to verify information previously provided to them regarding physical support currently provided to the Army Information Processing Center (AIPC)-Rock Island; specifically, machine/office space, electrical power and air conditioning availability and capacities.
- 2. During this meeting, the question of additional space was discussed. Mr. Dearborn stated that AIPC-Rock Island is currently assigned 245,340 square feet of space. Approximately 200,000 square feet of contiguous machine/office space is located on the first three floors of building 350. Mr. Dearborn also indicated there is approximately 220,000 square feet of additional first class, contiguous space available in the building, for example, 4th, 5th, and 6th floors. If requested, this additional 220,000 square feet could be reserved for the AIPC and made available within the year, bringing the total adjoining space in building 350 to over 420,000 square feet.
- 3. Please provide the name of your point of contact so we could make a formal presentation to you. My point of contact is Mr. John A. Ruble, Director, Directorate of Engineering and Housing, DSN 793-2120 or commercial (309) 782-2120.
- 4. Also, we have enclosed an information paper that describes the Arsenal's facilities and capabilities. Then, as a follow-up we are mailing you copies of a Rock Island Arsenal brochure and of the Quad Cities, the community in which we are located.

Enc l

Jenny Virtural TERRY L. NIENHOUSE Colonel, OD

Commanding

## Appendix Q. Report Distribution

### Office of the Secretary of Defense

Under Secretary of Defense for Acquisition and Technology
Deputy Under Secretary of Defense (Industrial Affairs and Installations)
Director, Defense Logistics Studies Information Exchange

Under Secretary of Defense (Comptroller)

Deputy Chief Financial Officer

Deputy Comptroller (Program/Budget)

Assistant Secretary of Defense (Command, Control, Communications & Intel)
Assistant Secretary of Defense (Public Affairs)

### Department of the Army

Auditor General, Department of the Army

### Department of the Navy

Assistant Secretary of the Navy (Financial Management and Comptroller) Auditor General, Department of the Navy

### Department of the Air Force

Assistant Secretary of the Air Force (Financial Management and Comptroller) Auditor General, Department of the Air Force

### Other Defense Agencies

Director, Defense Contract Audit Agency

Director, Defense Information Systems Agency

Director, Defense Information Systems Agency Western Hemisphere

Director, Defense Megacenter Columbus

Director, Defense Megacenter Mechanicsburg

Director, Defense Megacenter Ogden

Director, Defense Megacenter Oklahoma City

Director, Defense Megacenter Rock Island

Director, Defense Megacenter St. Louis

Director, Defense Logistics Agency

Director, National Security Agency

Inspector General, National Security Agency

Inspector General, Defense Intelligence Agency

### Non-Defense Federal Organizations and Individuals

Director, Federal Emergency Management Agency
Office of Management and Budget
Technical Information Center, National Security and International Affairs Division,
General Accounting Office

Chairman and ranking minority member of each of the following congressional committees and subcommittees:

Senate Committee on Appropriations

Senate Subcommittee on Defense, Committee on Appropriations

Senate Committee on Armed Services

Senate Committee on Governmental Affairs

House Committee on Appropriations

House Subcommittee on National Security, Committee on Appropriations

House Committee on Government Reform and Oversight

House Subcommittee on Government Management, Information, and Technology,

Committee on Government Reform and Oversight

House Subcommittee on National Security, International Affairs, and Criminal Justice,

Committee on Government Reform and Oversight

House Committee on National Security

Senator Tom Harkin, U.S. Senate

Congressman James A. Leach, U.S. House of Representatives

## **Audit Team Members**

The Contract Management Directorate, Office of the Assistant Inspector General for Auditing, DoD, produced this report.

Paul J. Granetto Wayne K. Million Nicholas E. Como Gopal K. Jain Sheryl L. Jansen Wei K. Chang