



*REPORT OF THE  
COMPTROLLER GENERAL  
OF THE UNITED STATES*

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B-172707

## Army Plans To Realine The Armament Community

Formation of the U.S. Army Armament Development Center and the Armament Logistics Command will consolidate the U.S. Army Materiel Development and Readiness Command armament field elements into two organizations--one with responsibility for materiel developmnet, the other for logistics.

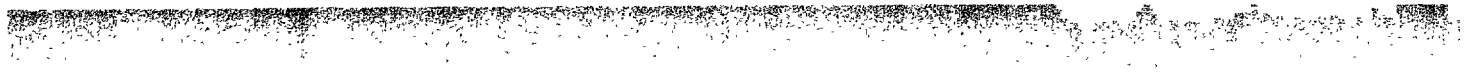
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The Army currently estimates the realinement will cost about \$75 million, and after completion of the realinement, the annual operating costs will decrease by about \$42 million. GAO believes the Army cost estimate is reasonable, but the estimated annual operating-cost reductions are overstated.

LCD-76-448

AUG. 3, 1976

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B-172107

## Army Plans To Realign The Armament Community

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The realignment is part of a general reorganizational change within the Army to improve the Army's materiel acquisition process by establishing mission-oriented development and logistics centers.

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COMPTROLLER GENERAL OF THE UNITED STATES  
WASHINGTON, D.C. 20548

B-172707

The Honorable Edward Mezvinsky  
House of Representatives  
The Honorable Thomas F. Railsback  
House of Representatives  
The Honorable John C. Culver  
United States Senate  
The Honorable Charles H. Percy  
United States Senate  
The Honorable Dick Clark  
United States Senate  
The Honorable Adlai E. Stevenson III  
United States Senate

Your letter of December 18, 1975, asked us to review the Army's plan for establishing an Armament Development Center and an Armament Logistics Command. As requested, we evaluated (1) the annual recurring cost reductions and the one-time costs, (2) the community impact data, and (3) the environmental impact assessments in the Army's justification study for the realignment.

On June 4, 1976, we gave you our proposed digest to this report. Since then we discussed the results of our review with Army officials, and on the basis of our evaluation of their comments, we made some revisions to the report. This is our final report on the results of our review.

  
Comptroller General

of the United States

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### ABBREVIATIONS

<b>GAO</b>	General Accounting Office
<b>EPA</b>	Environmental Protection Agency

D I G E S T

On December 2, 1975, the Secretary of the Army announced a realignment plan to establish a U.S. Army Armament Development Center and the Armament Logistics Command. The plan would establish

- the Development Center Headquarters and its Large Caliber and Small Caliber Weapons Systems Laboratories at Picatinny Arsenal, New Jersey;
- the Development Center Ballistics Research and Chemical Systems Laboratories at Aberdeen Proving Ground, Maryland; and
- the Logistics Command Headquarters at Rock Island, Illinois.

As a result:

- All missions of the Rodman Laboratory, located at Rock Island, would be transferred to elements of the Development Center and the Logistics Command.
- Most missions of the Edgewood Arsenal at Aberdeen would transfer in place to the Development Center.
- Some logistics functions of the Watervliet Arsenal, New York, would transfer to the Logistics Command Headquarters site at Rock Island.
- Most missions of the Picatinny Arsenal would transfer in place to the Development Center.
- The closure of the Frankford Arsenal in Pennsylvania, announced in November 1974, will continue. All its missions would transfer to elements of the Development Center and the Logistics Command.

The realignment plan provides for transferring 3,242 military and civilian positions and eliminating 2,647 military and civilian positions.

#### COST REDUCTIONS DUE TO REALIGNMENT

The Army estimated that the annual operating costs would decrease by about \$42 million after completion of the realignment. Its reduction was based primarily on the number of positions being eliminated. GAO, however, determined that the annual operating costs would decrease by about **\$31.2** million as a result of the realignment and by about \$6.3 million because of workload reductions not related to the realignment.

#### ONE-TIME COSTS

The Army estimated that the one-time costs for the realignment would be about \$86 million. The cost estimates were based on relocating employees and equipment, altering existing facilities, and constructing new facilities. GAO determined that the Army's estimate of one-time costs was reasonable.

Since the study, the Army has changed several construction projects and, as a result, its latest estimate for total one-time costs is about \$75 million. This latest estimate seems reasonable.

#### COST AVOIDANCES

The Army estimated that the realignment, including the Frankford Arsenal closure, would result in avoidances of construction costs of about \$9.6 million. GAO determined that the cost avoidances would be about \$8.1 million, half of which would have been avoided as a result of the Frankford Arsenal closure.

#### COMMUNITY IMPACT

The economic impact of the realignment on the various geographical locations shows the net change at a given point in time. The Army estimated, on the basis of the January 31, 1975, payroll data, an increase

in Army payroll for the community of Rock Island to be about \$588,000. According to Army officials actual payroll data was used because the National Environmental Policy Act of 1969 requires them to consider all known Federal actions in developing the impact data, in addition to the realignment. On the basis of June 30, 1976, projected payroll data--the date and data used for computing costs in the study--the community will experience a decrease of about \$19 million.

#### ENVIRONMENTAL IMPACT

Although the Environmental Protection Agency identified several factors that should have been addressed in the Army's assessments, the Agency agreed with the Army that an environmental impact statement did not need to be filed.

#### FRANKFORD ARSENAL CLOSURE

In November 1974 the Secretary of Defense announced plans to close the Frankford Arsenal. Implementation of the announced closure plan for the arsenal was superseded by the announcement of the realignment of the armament community. If the Frankford Arsenal closure plan had been implemented, it would have resulted in reductions in annual operating cost of \$20.5 million and in one-time costs of about \$33.6 million.

Because Frankford Arsenal is an integral part of the armament community, its closure costs are also included as part of the estimates for the armament community realignment. Although it would be desirable, in GAO's view, to identify the Frankford Arsenal closure costs included in the total, this was not feasible.

#### AGENCY COMMENTS AND GAO EVALUATION

Army officials agreed that \$6.3 million of the cost reductions would occur because of workload reductions rather than the realignment and that cost reductions of about \$20.5 million would have occurred if the



Frankford Arsenal was closed without the realignment. The Army officials also agreed with GAO's adjustments to the one-time costs.

The officials agreed that errors were made in computing the cost reductions but did not agree that the errors overstated the estimated annual operating cost reductions by \$4.4 million. The Army officials believed that the errors resulted **in a net \$1.1 million** overstatement of the cost reductions. The primary reasons for the differences are presented in the report.

## CHAPTER 1

### INTRODUCTION

On December 2, 1975, the Secretary of the Army announced Plans to establish a U.S. Army Armament Development Center and an Armament Logistics Command: The plans will-consolidate the U.S. Army Materiel Development and Readiness Command armament field elements into two distinct organizations--one with responsibility for materiel development and the other for logistics. The realinement is expected to be completed by 1980.

The realinement plan calls for establishing the Development Center Headquarters and its Large and Small Caliber Weapons Systems Laboratories at Picatinny Arsenal, New Jersey; the Development Center's Ballistics Research and Chemical Systems Laboratories at Aberdeen Proving Ground, Maryland; and the Logistics Command Headquarters at Rock Island, Illinois.

The plan provides for transferring 3,242 military and civilian positions and eliminating 2,647 military and civilian positions.

#### LOCATIONS AFFECTED BY THE REALINEMENT

The action affects the Rock Island Arsenal, the Aberdeen Proving Ground, the Watervliet Arsenal, the Picatinny Arsenal, and the Frankford Arsenal.

##### Rock Island Arsenal, Illinois

The current logistical missions and functions of the U.S. Army Armament Command Headquarters will transfer to the U.S. Army Armament Logistics Command Headquarters. The research, development, test, and engineering command and control function and the Cannon Artillery Weapons System and Vehicle Rapid Fire Weapons System Project Managers will transfer to Picatinny Arsenal. The Rodman Laboratory will be closed and its functions will be transferred to the Armament Development Center and the Armament Logistics Command.

##### Aberdeen Proving Ground, Maryland

Most Edgewood Arsenal missions will transfer to the Armament Development Center Chemical Systems Laboratory, and the reorganized Ballistics Research Laboratory will remain at the Aberdeen Proving Ground as one of the four laboratories of the Armament Development Center.

Watervliet Arsenal, New York

Selected logistics functions will be transferred from the Watervliet Arsenal to the Armament Logistics Command, Rock Island Arsenal.

Picatinny Arsenal, New Jersey

Most currently assigned missions and functions will be retained at Picatinny Arsenal.

Frankford Arsenal, Pennsylvania

The Frankford Arsenal closure announced in November 1974 will continue.

The following table summarizes by location the Army's estimates of the jobs expected to be transferred and eliminated from June 30, 1976; to September 30, 1980, as a result of the realignment.

	Transfers <u>out</u>	Jobs <u>eliminated</u>	Transfers <u>in</u>	Net <u>change</u>
Rock Island Arsenal	330	302	647	-485
Aberdeen Proving Ground	327	361	246	-442
Watervliet Arsenal	<b>53</b>	53	-	-106
Picatinny Arsenal	281	903	2,253	1,109
Frankford Arsenal	1,751	1,028	-	-2,779
Others	<u>-</u>	<u>-</u>	<u>56</u>	<u>56</u>
Total	<u>3,242</u>	<u>2,647</u>	<u>3,242</u>	<u>-2,647</u>

In addition to transferring missions to other locations, the plan includes contracting out about 1,471 staff-years currently being done at these various Army armament field elements.

RELATIONSHIP TO OTHER ACTIONS

The announced plan to establish an Armament Development Center is part of a general reorganizational change within the Army to improve the Army's materiel acquisition process. The recommendation that the Army establish mission-oriented development and logistics centers, including an Armament Development Center, was made in April 1974 by the Army Materiel Acquisition Review Committee. The Secretary of the Army

formed the committee to review the Army's total materiel acquisition process and to recommend improvements.

The committee recommended that the Army establish mission-oriented development centers by consolidating (1) laboratories, (2) installation and commodity command research, development, and engineering elements, (3) project managers, (4) support elements, (5) selected user elements, and (6) command elements. It also recommended that logistics and readiness functions be done in logistics centers.

The Army reviewed the committee recommendations and prepared concept plans and studies for several development centers. Some development centers have since been established. In addition, the reorganization of the U.S. Army Materiel Command Headquarters announced in July 1975 separates the command into the two major mission areas of materiel development and readiness. In January 1976 the command was redesignated as the U.S. Army Materiel Development and Readiness Command. The new development and logistics centers, including the planned Armament Development Center and Armament Logistics Command, are planned to report to the U.S. Army Materiel Development and Readiness Command.

## CHAPTER 2

### ECONOMIC ANALYSIS

The Army estimated in the justification study for forming the U.S. Army Armament Development Center and the Armament Logistics Command that the annual operating costs would be reduced by about \$42 million, the one-time cost of the realignment would be about \$86 million, and the realignment would result in construction cost avoidances of about \$9.6 million. The cost reductions were based primarily on the number of positions being eliminated, and the one-time costs were based on relocating employees and equipment, altering existing facilities, and constructing new facilities. These estimates include the operating cost reductions and one-time costs for (1) the realignment, (2) workload reductions, and (3) the Frankford Arsenal closure.

Our review disclosed that the Army overstated the total annual operating cost reductions and the construction cost avoidances. The Army's estimate for the total one-time costs seems reasonable.

#### OPERATING-COST REDUCTIONS

As shown in the following table, the Army overstated the cost reductions resulting from the realignment.

Total cost reductions from Army study	\$41,882,000
Less: GAO adjustments	<u>4,351,000</u>
	37,531,000
Less: Reductions related to workload reductions (note a)	<u>6,288,000</u>
Total cost reductions resulting from the realignment, including Frankford Arsenal closure (note b)	<u>\$31,243,000</u>

a/The study showed \$5.008 million of the cost reductions resulted from workload reductions, and we believe an additional \$1.28 million resulted from workload reductions. The reductions could be achieved without the realignment.

b/If the Secretary of the Army had decided not to realign the armament community, the November 1974 plan to close the Frankford Arsenal could have been implemented and there could have been a cost reduction of about \$20.5 million.

### Our adjustments

During our review we were unable to identify specific costs associated with the missions being transferred. We therefore evaluated the cost reductions by appropriation categories to determine the reasonableness of the Army's estimate. We applied a consistent methodology using the average staff-year costs and determined that the Army overstated the cost reductions in the research, development, test, and evaluation appropriation by \$6.97 million and understated the cost reductions in the operation and maintenance and the procurement appropriations by \$4.976 million.

We also reviewed the various personnel and staff-year transfers to determine the reasonableness of the estimate. On the basis of our evaluation, we found that 120 more end-strengths were transferred to Armament Logistics Command Headquarters than were staff-years. The costs associated with the 120 staff-years are included in the Army's estimate of the cost reductions and result in an overstatement of the cost reduction by about \$2.357 million.

### Workload reductions

The Army study showed that the work force is being reduced by 174 staff-years because of workload reductions rather than the realignment. About \$5 million of the cost reduction is for this workload reduction.

Our review disclosed that reductions of 50 additional staff-years for work now being done at Aberdeen Proving Ground is also the result of workload reductions. The Army eliminated this work because it was no longer needed. About \$1.3 million of the cost reduction is for this workload reduction.

### Frankford Arsenal closure

In November 1974 the Army announced that the Frankford Arsenal would be closed. On the basis of our review of the justification study for the closure, we believe it would have resulted in annual recurring cost reductions of about \$20.5 million. 1/

The Army's justification study for the armament realignment restated that the Frankford Arsenal would close.

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1/"Examination Of The Announced Closure Of Frankford Arsenal" (LCD-76-305, Sept. 23, 1975).

Although the armament realignment study included annual recurring cost reductions for the Frankford closure, the study did not specifically identify them, and we found it impossible to identify and isolate them. Because the current plan for forming the Development Center and Logistics Command calls for different actions for the Frankford Arsenal, the amount of annual recurring cost reductions resulting from the closure could not be accurately determined.

#### Army comments and our evaluation

We discussed the results of our review with Army officials to obtain their comments. The officials agreed that \$6.3 million of the annual operating-cost reduction was the result of workload reductions rather than the realignment. The officials also agreed that a **\$20.5-**million reduction would have occurred if the Army had implemented its November 1974 plan for closing the Frankford Arsenal.

The Army officials also agreed that there were errors in computing the annual operating-cost reductions. However, the Army officials believed that the errors resulted in a net \$1.1 million overstatement of the cost reductions rather than the \$4.4 million we computed. The primary reasons for the differences are that Army officials believe that (1) they also understated by about \$0.6 million the cost reductions in the Army Stock Fund and (2) the error of **\$2.357** million involving the transfer of 120 staff-years has no effect on the cost reductions.

From our analysis of the information in the justification study, we believe that there was no error in the Army's computation for the cost reductions in the Stock Fund and that the estimate included in the study was reasonable.

With respect to the 120 staff-years, Army officials believe there is no way to prove or disprove whether the cost reductions are overstated by about \$2.357 million as a result of the error. Our evaluations of the reasonableness of the cost reductions show that the cost reductions are overstated by the equivalent of about 120 staff-years. Consequently, we believe it results in an overstatement of \$2,357 million.

#### ONE-TIME COSTS

Although we made several adjustments to the Army's one-time costs estimates, the net effect of all our adjustments was that the Army understated the one-time costs only

by \$971,200. Conversely, we found that the cost estimates include \$813,600 for the workload reductions discussed on page 5 rather than to the realignment. Therefore, the amount for the realignment is about \$86.1 million. The following table shows the Army's cost estimates included in the study and our adjustments to the estimates.

<u>Cost element</u>	<u>Amount included in Army study</u>	<u>GAO adjustment</u>	<u>Revised estimate</u>
Movement of personnel	\$ 9,000	\$ -	\$ 9,000
Movement of household goods	71,000	-	<b>71,000</b>
Dislocation allowances	9,000	-	9,000
Terminal leave pay- ments	296,000	-	296,000
Severance pay	9,317,000	-	9,317,000
Relocation costs	8,699,000	563,000	9,262,000
Overtime	519,000	-	519,000
Temporary duty travel	600,000	-	600,000
Recruitment	6,201,000	490,905	6,691,905
Training	674,000	-	674,000
Movement of office furniture	560,000	49,120	609,120
Transportation of sup- plies and equipment	3,469,000	76,905	3,545,905
Layaway of equipment	520,000	-	520,000
Caretaker costs	1,744,000	-	1,744,000
Decontamination	233,000	-	233,000
Internal relocation	1,257,000	45,200	1,302,200
Equipment-packing, crating, and handling	4,586,000	-1,287,395	3,298,605
Equipment-installation	4,253,000	-	4,253,000
New equipment	3,445,000	-	3,445,000
Alteration and con- struction (note a)	<u>39,525,000</u>	<u>1,033,429</u>	<u>40,558,429</u>
Total (note b)	<u>\$85,987,000</u>	<u>\$ 971,164</u>	<u>\$86,958,164</u>

a/Our adjustment to the alteration and construction cost estimates was made on the basis of the projects included in the Army study. Since the study, the Army has made substantial changes to several projects and has added several new projects. As a result, the Army's latest estimate for the alteration and construction costs is about \$28.7 million.

b/If the decisionmaker had decided not to realign the armament community, the earlier plan to close the Frankford Arsenal could have been implemented and the Army probably would have incurred one-time costs of about \$33.6 million to close the arsenal.



### Relocation costs

The one-time relocation cost of the realignment was understated by \$563,000 because the study used outdated per diem rates in computing the travel costs to relocate civilian employees to their new duty stations.

The relocation costs were computed using the \$25 a day and 12 cents a mile rate. In May 1975 the Joint Travel Regulations were amended to increase the allowable per diem rate to \$33 and to increase the mileage rate to 15 cents. The one-time costs in the justification study were not updated to reflect the new rates and as a result the relocation costs were understated **by** \$563,000.

### Recruitment costs

The one-time recruitment cost of the realignment was understated by \$490,905 because both the number of new employees to be recruited and the related travel costs were understated.

The number of employees to be recruited was understated by 55 because the computation was not updated after the needs were changed. This oversight resulted in a \$160,150-cost understatement. As was the case for relocation costs, the travel costs to recruit the new employees did not consider the increased per diem or mileage rates, understating costs by \$330,800.

### Costs to move office equipment

The one-time office equipment moving cost of the realignment was understated by \$49,120 because the study rounded figures to compute the cost of moving employees' office furniture.

The study's computation for moving each employees' office furniture was based on the average weight of 1,200 pounds for each employee which was taken from previous Army realignment studies. The Army used \$216 for moving the 1,200 pounds in the previous studies. The justification study team rounded the figure to \$200.

### Costs to transport supplies and equipment

The one-time supplies and equipment transportation cost of the realignment was understated by \$76,905 because improper rates were applied to the replacement cost of equipment to be moved to arrive at the estimated transportation costs.

The transportation costs were computed using 1, 2, or 4 percent of the replacement cost of equipment, depending on the distance to be moved. These rates were based on past experience. An Army regulation specifies that a flat rate of 3 percent is to be applied to the replacement cost of equipment regardless of where it is to be shipped within the continental United States.

#### Internal relocation costs

The one-time internal relocation cost of the realignment was understated by \$45,200 because the study understated by 452 the number of employees required to make interim moves at Picatinny Arsenal.

The justification study assumed that 4,058 employees would be required to move at an estimated cost of \$100 a move, or a total cost of \$405,800. The supporting documentation used to compute these moves showed that 4,510 employees would be moving for a total cost of \$451,000, or \$45,200 more than stated in the justification study.

#### Packing, crating, and handling costs

The one-time packing, crating, and handling cost of the realignment was overstated by \$1,287,395 because improper rates were applied to replacement cost of equipment to be moved to arrive at the estimated costs.

The packing, crating, and handling costs were computed using either 5 or 6 percent of the replacement cost of equipment, depending on the type of equipment to be moved. Both the applicable Army regulation and recent past experience show a rate of 3.5 percent should be used.

#### Alteration and construction costs

The justification study included one-time construction costs of \$39,525,000 for 18 projects at Picatinny Arsenal and for 1 project at Rock Island Arsenal. Twelve projects costing \$10,498,000 were for altering existing facilities, and seven projects costing \$29,027,000 were for constructing new facilities.

The one-time costs for five projects were understated by about \$930,000 because the Army reduced the original estimates without any support for doing so.

Three additional projects had detailed construction cost estimates that were prepared shortly after the justification study. Although the later estimates were \$103,429

higher than the study estimates, no amendment **was** made to the study to show the latest estimates, thereby understating the one-time costs.

Since the December 2, 1975, announcement on forming the Armament Development Center and Logistics Command, the Army revised its estimate for the alteration and construction costs. The Army's latest estimate is that the alteration and construction costs will be about \$28.7 million compared to the \$39.5-million estimate in the justification study.

The latest estimate is lower primarily because of a reduction in the planned construction of the small-caliber test ranges at the Picatinny Arsenal. The original plan was to build 16 ranges up to 800 meters long at an estimated cost of about \$13.3 million and the latest plan is to build only 10 ranges up to 300 meters long at an estimated cost of about \$2.2 million.

The project description for the proposed \$13.3 million small-caliber-ammunition ballistic test range facility points out that a minimum of \$1.9 million was required to construct an austere facility at Picatinny to carry out the realignment. Therefore, the latest estimate of about \$2.2 million seems reasonable.

We inspected existing facilities at both the Picatinny and Rock Island Arsenals as well as sites for new construction at Picatinny. The facilities appeared to be average Government working space. We calculated the total space expected to be available at Picatinny Arsenal, and we believe that adequate space should be available to accommodate the employees planned to be located at the arsenal after completion of the alteration and construction projects included in the Army study.

#### Agency comments

We discussed our adjustments to the estimated one-time costs with Army officials, and they generally agreed with our findings.

#### COST AVOIDANCES

The Army estimated that the realignment, including the Frankford Arsenal closure, would result in construction cost avoidances of about \$9.6 million, consisting of two projects at Rock Island and four projects at Frankford Arsenal. The following table shows the estimates included in the Army study and our adjustment.

	<u>Amount included in Army study</u>	<u>GAO adjustment</u>	<u>Revised estimate</u>
Projects avoided at Rock Island	\$5,261,000	\$1,528,000.	\$3,733,000
Projects avoided at Frankford	<u>4,335,000</u>	<u>0</u>	<u>4,335,000</u>
Total projects avoided	<u>\$9,596,000</u>	<u>\$1,528,000</u>	<u>\$8,068,000</u>

We believe one project for altering space at Rock Island should not be included as a cost avoidance. The purpose of the project was to alter space for the employees and missions which were planned to be transferred to the Rock Island Arsenal as a result of the November 1974 announcement that the Frankford Arsenal would close. Because the November 1974 closure plan was to transfer more positions to Rock Island than in the realignment plan, there was no longer a need to modify as much space at Rock Island to accommodate the people. The Army estimated that \$1,528,000 in construction costs would be avoided as a result of this change in plans. Since this project is for altering space which would not have been altered if Frankford Arsenal was kept open and the space will not be altered if Frankford Arsenal is closed, we believe it cannot be considered a cost difference between these two alternatives. We believe the other project avoided at Rock Island, estimated at \$3,733 million, was a valid avoidance because it was for planned improvement at Rodman Laboratory which is no longer required because the Rodman Laboratory is being closed as a result of the realignment.

The four projects avoided at Frankford Arsenal, estimated to cost \$4,335,000, would have been avoided even if the armament community was not realigned and, therefore, were also included as cost avoidances in the November 1974 plan to close Frankford Arsenal.

## CHAPTER 3

### COMMUNITY AND ENVIRONMENTAL IMPACTS

In accordance with the requirements of the National Environmental Policy Act of 1969, the Army study included community and environmental impact assessments to show the probable impact of the realignment on various locations. The impact data shows the net change at a given point in time.

Because the Government and private payroll may change over a period of time with or without the realignment, different results for the impacts on the communities are obtained by comparing data at different points in time. The Army estimated that on the basis of January 31, 1975, payroll data, the community of Rock Island will experience an increase in payroll of about \$588,000. On the basis of June 30, 1976, projected payroll data--the date and data used for computing costs in the study--the community will experience a decrease in payroll of about \$19 million.

#### COMMUNITY IMPACT

The Army compared actual January 31, 1975, data with the projected data after completion of the realignment in September 1980 to show the community impact of the realignment. According to Army officials, actual onboard personnel levels were used to measure the economic impact on the communities to insure that the impact data reflected, to the extent possible, actual payroll changes. By using January 31, 1975, data, personnel changes in the 17-month period between January 31, 1975, and June 30, 1976--the date used for other comparisons in the study--were attributed to the realignment whereas they may have been due to workload changes and other factors not directly associated with the proposed realignment. For example, the Rock Island personnel increased by 295 between January 31, 1975, and June 30, 1975.

Gains and losses in Government payroll affects the non-Government payroll needed to support the Government workers. A Department of Commerce earnings multiplier, which varies by geographical areas, is applied to increases or decreases in the Government payroll to show the total economic impact on the various communities. Failure to apply a multiplier results in ignoring the ripple effect of the estimated change in the Government payrolls on private payrolls in the nearby communities.

The following table shows the estimated changes when the actual data for January 31, 1975, which was used by the

Army, is compared to the expected employment and payroll for September 30, 1980, the planned completion date for the realignment.

<u>Location</u>	<u>Government personnel changes</u>	<u>Government payroll changes</u>	<u>Earnings multiplier</u>	<u>Total payroll changes</u>
Rock Island Arsenal	184	\$587,981	2.00	\$ 1,175,962
Aberdeen Proving Ground (note a)	-201	-6,806,613	2.27 2.78	-15,451,011 -18,922,384
Watervliet Arsenal	-114	-2,957,156	2.50	-7,392,890
Picatinny Arsenal (note b)	1,128	23,590,106	2.56	60,390,671
Frankford Arsenal (note b)	-3,625	-66,124,867	2.63	-173,908,400

a/The Department of Commerce has two multipliers for Aberdeen Proving Ground. The 2.27 multiplier excludes the city of Baltimore, Maryland.

b/Includes changes in nonappropriated fund civilians and contractual labor at the locations.

The Army used projected June 30, 1976, personnel levels and compared them to the projected future personnel levels when publicly announcing the personnel impact of the realignment. Projected June 30, 1976, data was also used for estimating the total cost reductions and one-time costs resulting from the realignment.

The following table shows the estimated community impact when projected June 30, 1976, information is used in lieu of actual January 31, 1975, information.

<u>Location</u>	<u>Government personnel changes</u>	<u>Government payroll changes</u>	<u>Earnings multiplier</u>	<u>Total payroll changes</u>
Rock Island Arsenal	-485	-9,499,619	2.00	-18,999,238
Aberdeen Proving Ground	-442	-9,512,773	2.27	-21,593,994
Watervliet Arsenal	-106	-1,463,000	2.78	-26,445,508
Picatinny Arsenal	1,144	25,044,044	2.50	-3,657,500
Frankford Arsenal	1,144	25,044,044	2.56	64,112,752
Frankford Arsenal	-2,981	-53,925,800	2.63	-141,824,850

As shown in the above tables, using January 31, 1975, actual data results in a \$1.2-million increase in the Rock Island-area payroll whereas using projected June 30, 1976, data results in about a \$19-million decrease. However, neither of these computations may indicate the actual impact on the Rock Island community because the impact of the single service manager for conventional ammunition is not considered in the computations. Although the Department of Defense announced plans to establish the single service manager at Rock Island Arsenal and the action is expected to increase employment, the Army does not know the amount of the increase and will not know the amount until after the implementation plan is approved.

#### ENVIRONMENTAL IMPACT

The justification study included environmental impact assessments for each location affected by the realignment. The assessments were prepared to (1) identify whether the proposed action was major, (2) determine whether the realignment would have a significant impact on the quality of the human environment, and (3) determine whether an environmental impact statement was required. Because the Army concluded that the realignment was a major Federal action and that there should be no significant adverse environmental impact resulting from the realignment, no environmental impact statement was prepared.

We requested the Environmental Protection Agency (EPA), Region V, Chicago, to comment on the adequacy of the assessments. EPA stated that assessments prepared for both Rock Island and Picatinny Arsenals support a decision to proceed without requiring the preparation of formal statements, EPA did point out, however, that the Army should indicate whether

(1) sewage treatment would be adequate at Picatinny to handle the additional wastes, (2) nearby communities would be able to handle the additional population increase (1,081 persons), and (3) new buildings to be constructed at Picatinny would include energy conservation measures.

The Army's environmental impact assessment does state that the move will have no significant adverse affect on air quality, water quality, or solid waste disposal. The assessment also stated that the population increases would present no problems to the community facilities available to service them. The assessment, however, did not contain a detailed analysis of the problems posed by EPA.

We discussed these problems with responsible Army officials who said they were satisfied that their surveys showed sewage treatment and community facilities would be adequate. We did not study the problems raised by EPA because of time requirements.

The assessments were prepared in accordance with the applicable Army regulation and, with the exceptions noted above, address all issues required by the regulation.

#### AGENCY COMMENTS AND OUR EVALUATION

The Army officials agreed that, to be consistent with the rest of the study, the June 30, 1976, projection for personnel levels and payroll should have been used in preparing the community impact data sheets rather than the actual January 31, 1975, data.

The Army officials said that actual information, as of January 1975, was used rather than projected June 30, 1976, data because the National Environmental Policy Act of 1969 requires them to consider all known Federal actions in developing the impact data, in addition to the realignment. The officials believe that the Army methodology reflects real impacts on the communities because actual levels of employment are compared with expected actual future levels of employment.

We agree that, to show the probable impact of the realignment, comparing actual levels of employment with expected actual future levels of employment is best. However, using January 31, 1975, actual data results in comparing actual levels 17 months before the expected implementation date for the realignment with the possible future levels. The comparison, therefore, may not show the impact of the realignment.



Regardless of which date is selected for the comparison, the impact of the realignment on the Rock Island community would tend to decrease because the realignment is to be implemented over several years. Army officials said that using projected June 30, 1976, data would not have altered the realignment decision.

## CHAPTER 4

### SCOPE; OF REVIEW

We reviewed (1) the community impact, (2) the accuracy of the cost effectiveness data used and provided by the Army throughout its decisionmaking process, (3) whether the Army overlooked or ignored other cost considerations which were basic or incidental to this realignment, and (4) the adequacy of the environmental impact assessments in meeting the requirements of the Army regulations.

Our review of cost effectiveness and community impact data was based on information contained in the case study and justification folder the Army prepared in November 1975--the document the decisionmakers used to determine the feasibility of the realignment. Some of the assumptions made in the study that qualified both that document and our review were:

- For savings to be achieved, the authorized personnel strength at the end of fiscal year 1576 (baseline) must be funded.
- Funds must be made available as they are needed for construction of facilities to accommodate the Armament Development Center Headquarters at Picatinny Arsenal.
- It is possible to consolidate the research and development activities and reorganize them into systems laboratories that will provide an opportunity for improvement and a climate for change.
- The activities gaining workload are equally productive as those losing workload, making it possible to transfer workload on a one-for-one basis. The cost of contracting will equal the cost of the staff-years transferred to contract.

We reviewed records, interviewed officials, and toured facilities at the following installations.

- Headquarters, U.S. Army Materiel Readiness and Development Command, Alexandria, Virginia.
- Headquarters, U.S. Army Armament Command, Rock Island, Illinois.
- Rodman Laboratory, Rock Island Arsenal, Rock Island, Illinois.

--Picatinny Arsenal, Dover, New Jersey.

--Environmental Protection Agency, Region V, Chicago,  
Illinois.

We also met with representatives of the Quad-City Task Force who are opposed to the transfer of the Rodman Laboratory from Rock Island Arsenal.