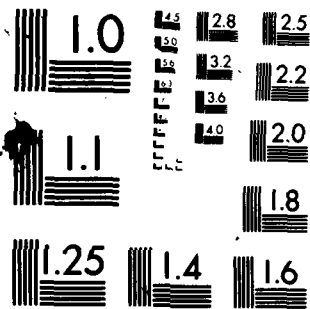


DEPUTY CHIEF OF STAFF FOR RESEARCH DEVELOPMENT AND AC--ETC F/G 15/5
DEPARTMENT OF THE ARMY JUSTIFICATION OF ESTIMATES FOR FISCAL YE--ETC(U)
FEB 82

NL

1. $\frac{1}{2} \leq \frac{1}{2} \leq 1$

END
DATE
FILMED
6 82
ptig



MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS-1963-A

(12)

**DEPARTMENT OF THE
ARMY**

JUSTIFICATION OF ESTIMATES FOR FISCAL YEAR 1983 (U)
Submitted to Congress
FEBRUARY 1982



DTIC
ELECT*
S MAY 18 1982
A

DTIC FILE COPY

RESEARCH DEVELOPMENT, TEST AND EVALUATION, ARMY

This document has been approved
for public release and sale; its
distribution is unlimited.

UNCLASSIFIED

DEPARTMENT OF THE ARMY
RESEARCH, DEVELOPMENT, TEST AND EVALUATION, ARMY
TABLE OF CONTENTS

Page No.

Section 1: Budget Appendix Extract

Appropriation Language	1
Program and Financing Schedules	2
Object Classification Schedule	7
Personnel Summary	7

Section 2: Program Element Listing

Table of Contents	8
Introduction and Explanation of Contents	9
Summary by Research Categories (Program)	10
Summary by Budget Activities	10
Summary by FYDP Programs	10
Details by Budget Activity	
Technology Base	11
Advanced Technology Development	13
Strategic Programs	15
Tactical Programs	15
Intelligence and Communications	21
Defensewide Mission Support	22

Section 3: Performer Distribution 24

Section 4: Installation Analysis (In-House Installations) 25

Section 5: Analysis of Reimbursable Program 51

Section 6: Federal Contract Research Centers 54

UNCLASSIFIED

UNCLASSIFIED

TABLE OF CONTENTS

	<u>Page No.</u>
<u>Section 7:</u> Major Improvements to and Construction of Government-Owned Facilities Funded by RDTE, Army Appropriation, and	63
<u>Section 8:</u> Project Data for Construction at Government-Owned Facilities Funded by RDTE, Army Appropriation	67

UNCLASSIFIED

UNCLASSIFIED

DEPARTMENT OF THE ARMY
RESEARCH, DEVELOPMENT, TEST AND EVALUATION, ARMY
APPROPRIATION LANGUAGE

Section 1

For expenses necessary for basic and applied scientific research, development, test and evaluation, including maintenance, rehabilitation, lease, and operation of facilities and equipment, as authorized by law; (\$3,609,535/ \$4,484,000, to remain available for obligation until September 30, 1983/ 1984. (10 U.S.C. 2351, 4503; Department of Defense Appropriation Act, 1982; additional authorizing legislation to be proposed.)

UNCLASSIFIED



Accession For	
1. ☒ General	
2. ☐ Special	
3. ☐ Restricted	
4. ☐ Distribution	
Priority	
Distribution/	
Availability Codes	
Serial and/or	
Dist	Special
A	

UNCLASSIFIED

Army

Research, Development, Test, and Evaluation, Army

08 FEB 82

Program and Financing (in thousands of dollars)

Identification code	21-2040-0-1-081	Budget plan (amounts for RDT&E actions programmed)			Obligations		
		1981 actual	1982 est.	1983 est.	1981 actual	1982 est.	1983 est.
Program by activities:							
Direct:							
1.	Technology base	509,090	586,880	699,701	618,349	566,100	680,400
2.	Advanced technology development	159,401	210,652	314,828	147,040	216,900	308,500
3.	Strategic programs	286,632	462,109	919,001	265,763	431,300	887,100
4.	Tactical programs	1,668,778	1,572,970	1,678,959	1,637,111	1,572,700	1,672,783
5.	Intelligence and communications	42,395	47,157	73,058	39,454	47,600	69,500
6.	Defensewide mission support	577,978	729,967	798,755	581,241	696,987	784,598
Total direct		3,124,274	3,609,635	4,484,000	3,096,956	3,531,187	4,422,649
Reimbursable program		693,458	820,200	557,900	649,621	721,600	662,200
10.0001	Total	3,817,732	4,429,735	5,041,900	3,739,579	4,252,987	4,988,049
Financing:							
Offsetting collections from:							
11.0001	Federal funds	-669,424	-602,468	-650,583	-643,182	-602,466	-650,583
13.0001	Trust funds	-1,141	.....	.....	-1,002	.....	.....
14.0001	Non-federal sources	-22,893	-17,732	-7,317	-22,750	-17,732	-7,317
17.0001	Recoveries of prior year obligations(-)	.....	.....	.....	-2,967	.....	.....
Unobligated balance available, start of year:		.....	.....	.....	.....	.....	.....
21.4001	For completion of prior year budget plans	.....	.....	.....	-261,691	-319,334	-256,082
21.4002	Reprogramming from or to prior year budget plan	2,088	.....	.....	.....	.....	.....
22.4001	Unobligated balance transferred from other accounts(-)	-4,900	.....	.....	-4,900	.....	.....
24.4001	Unobligated balance available, end of year	.....	.....	.....	619,334	296,082	362,933
25.0001	Unobligated balance lapsing	6,342	.....	.....	6,342	.....	.....
40.0001	Budget authority	3,127,774	3,609,806	4,484,000	3,127,774	3,609,836	4,484,000
Relation of obligations to outlays:							
71.0001	Obligations incurred, net	.....	.....	.....	3,071,646	3,632,787	4,427,149
72.4001	Obligated balance, start of year	.....	.....	.....	1,185,992	1,291,624	1,556,311
74.4001	Obligated balance, end of year	.....	.....	.....	-1,291,624	-1,556,311	-1,846,560
77.0001	Adjustments in expired accounts	.....	.....	.....	-6,070	.....	.....
78.0001	Adjustments in unexpired accounts	.....	.....	.....	-2,967	.....	.....
90.0001	Outlays	.....	.....	.....	2,657,985	3,366,100	4,036,900

UNCLASSIFIED

UNCLASSIFIED

Army

Research, Development, Test, and Evaluation, Army

08 FEB 82

Program and Financing (in thousands of dollars)

1980 Fiscal year program

Identification code	21-2040-0-1-051	Budget plan (amounts for RDT&E actions programmed)			Obligations		
		1981 actual	1982 est.	1983 est.	1981 actual	1982 est.	1983 est.
Program by activities:							
Direct:							
1.	Technology base				28,364		
2.	Advanced technology development				9,608		
3.	Strategic programs				788		
4.	Tactical programs				77,429		
5.	Intelligence and communications				606		
6.	Defensewide mission support				22,060		
Total direct					139,046		
Reimbursable program					101,137		
10.0001	Total				240,182		
Financing:							
Offsetting collections from:							
11.0001	Adjustment to prior year federal fund orders				26,242		
13.0001	Adjustment to prior year trust fund orders				139		
14.0001	Adjustment to non-federal sources				143		
17.0001	Recoveries of prior year obligations(-)				-2,957		
Unobligated balance available, start of year:							
21.4001	For completion of prior year budget plans				-261,691		
21.4002	Reprogramming from or to prior year budget plan	2,056					
22.4001	Unobligated balance transferred from other accounts(-)	-4,900			-4,900		
25.0001	Unobligated balance lapsing	2,642			2,642		
40.0001	Budget authority						

UNCLASSIFIED

UNCLASSIFIED

Army

Research, Development, Test, and Evaluation, Army

08 FEB 82

Program and Financing (in thousands of dollars)

1981 Fiscal year program

Identification code 21-2040-0-1-051

Budget plan (amounts for
RDT&E actions programmed)

Obligations

	1981 actual	1982 est.	1983 est.	1981 actual	1982 est.	1983 est.
Program by activities:						
Direct:						
1. Technology base	809,090			489,895	19,085	
2. Advanced technology development	189,401			137,232	22,169	
3. Strategic programs	268,632			264,975	1,657	
4. Tactical programs	1,868,778			1,459,662	109,088	
5. Intelligence and communications	42,388			38,846	3,547	
6. Defensewide mission support	577,978			559,181	18,797	
Total direct	3,124,274			2,949,919	174,360	
Reimbursable program	693,468			648,484	144,974	
10.0001 Total	3,817,732			3,598,397	319,334	
Financing:						
Offsetting collections from:						
11.0001 Federal funds	-669,424			-669,424		
12.0001 Trust funds	-1,141			-1,141		
14.0001 Non-federal sources	-22,893			-22,893		
21.4001 Unobligated balance available, start of year					-319,334	
24.4001 Unobligated balance available, end of year				319,334		
25.0001 Unobligated balance lapsing	3,600			3,600		
40.0001 Budget authority	3,127,774			3,127,774		

UNCLASSIFIED

UNCLASSIFIED

Army

Research, Development, Test, and Evaluation, Army

08 FEB 82

Program and Financing (in thousands of dollars)

1982 Fiscal year program

Identification code	21-2040-0-1-081	Budget plan (amounts for RDT&E actions programmed)			Obligations		
		1981 actual	1982 est.	1983 est.	1981 actual	1982 est.	1983 est.
Program by activities:							
Direct:							
1.	Technology base		566,660		547,008	38,670	
2.	Advanced technology development		210,652		194,731	15,921	
3.	Strategic programs		462,109		429,643	32,466	
4.	Tactical programs		1,572,970		1,463,605	109,366	
5.	Intelligence and communications		47,157		43,853	3,504	
6.	Defensewide mission support		729,967		678,190	51,777	
Total direct			3,609,535		3,356,627	252,708	
Reimbursable program			620,206		578,626	49,374	
10.0001	Total		4,229,736		3,935,653	299,082	
Financing:							
Offsetting collections from:							
11.0001	Federal funds		-602,466		-602,466		
14.0001	Non-federal sources		-17,732		-17,732		
21.4001	Unobligated balance available, start of year					-298,082	
24.4001	Unobligated balance available, end of year				298,082		
40.0001	Budget authority		3,609,535		3,609,535		

UNCLASSIFIED

UNCLASSIFIED

Army	Research, Development, Test, and Evaluation, Army						08 FEB 82
		Program and Financing (in thousands of dollars)			1983 Fiscal year program		
Identification code	21-2040-0-1-051	Budget plan (amounts for RDT&E actions programmed)			Obligations		
		1981 actual	1982 est.	1983 est.	1981 actual	1982 est.	1983 est.
Program by activities:							
Direct:							
1.	Technology base			899,701			850,725
2.	Advanced technology development			314,529			292,679
3.	Strategic programs			919,001			864,634
4.	Tactical programs			1,878,959			1,863,386
5.	Intelligence and communications			73,056			66,996
6.	Defensewide mission support			798,766			742,616
Total direct				4,484,000			4,170,141
Reimbursable program				557,900			518,826
10.0001	Total			5,041,900			4,688,967
Financing:							
Offsetting collections from:							
11.0001	Federal funds			-550,583			-550,583
14.0001	Non-federal sources			-7,317			-7,317
24.4001	Unobligated balance available, end of year						362,833
40.0001	Budget authority			4,484,000			4,484,000

UNCLASSIFIED

UNCLASSIFIED

Army

Research, Development, Test, and Evaluation, Army

06 FEB 82

Object Classification (in thousands of dollars)

Identification code	21-2040-0-1-051	1981 actual	1982 est.	1983 est.
Direct obligations:				
Personnel compensation:				
111.101	Full-time permanent	824,064	347,859	362,260
111.301	Other than full-time permanent	18,124	18,524	18,786
111.801	Other personnel compensation	3,839	3,917	3,975
111.901	Total personnel compensation	844,027	369,000	379,000
112.101	Civilian personnel	33,213	34,000	35,900
121.001	Travel and transportation of persons	25,850	36,300	38,500
122.001	Transportation of things	5,914	12,700	18,500
123.201	Communications, utilities and other rent	12,238	18,700	25,200
124.001	Printing and reproduction	375	900	900
Other services:				
125.002	Purchases from industrial funds	236,783	291,900	345,900
125.003	Contracts	2,242,061	2,583,187	3,389,648
126.001	Supplies and materials	85,472	95,800	102,200
131.001	Equipment	98,740	107,500	112,000
141.001	Grants, subsidies, and contributions	1,284	1,200	1,300
199.001	Total direct obligations	3,086,958	3,631,187	4,422,848
Reimbursable obligations:				
Personnel compensation:				
211.101	Full-time permanent	146,291	156,800	159,200
212.101	Civilian personnel	12,883	13,300	14,000
221.001	Travel and transportation of persons	10,147	11,800	8,800
222.001	Transportation of things	977	1,300	900
223.201	Communications, utilities and other rent	5,601	10,000	8,600
224.001	Printing and reproduction	848	1,400	900
Other services:				
225.002	Purchases from industrial funds	18,382	23,400	20,300
225.003	Contracts	991,284	435,400	291,600
226.001	Supplies and materials	32,498	64,900	48,600
231.001	Equipment	30,372	13,200	11,600
232.001	Land and structures	288	300	300
299.001	Total reimbursable obligations	648,621	721,800	562,200
999.001	Total obligations	3,735,579	4,352,987	4,985,048
PERSONNEL SUMMARY				
TOTAL NUMBER OF FULL-TIME PERMANENT POSITIONS		18,687	18,871	18,990
TOTAL COMPENSABLE WORKYEARS:				
FULL-TIME EQUIVALENT EMPLOYMENT		20,469	19,219	19,316
FULL-TIME EQUIVALENT OF OVERTIME AND HOLIDAY HOURS		540	412	404
AVERAGE ES SALARY		50,112	58,500	58,500
AVERAGE GS GRADE		9.32	9.47	9.47
AVERAGE GS SALARY		23,940	25,137	25,139
AVERAGE SALARY OF UNGRADED POSITIONS		20,162	20,358	20,093

UNCLASSIFIED

UNCLASSIFIED

DEPARTMENT OF THE ARMY
RESEARCH, DEVELOPMENT, TEST AND EVALUATION, ARMY
PROGRAM ELEMENT LISTING
TABLE OF CONTENTS

Section 2

Page No.

1. Introduction and Explanation of Contents.	9
Summaries by:	
1. Research Categories (Program)	10
2. Budget Activities	10
3. FYDP Programs	10
Details by Budget Activity:	
1. Technology Base	11
2. Advanced Technology Development	13
3. Strategic Programs	15
4. Tactical Programs	15
5. Intelligence and Communications	21
6. Defensewide Mission Support	22

UNCLASSIFIED

Section 2 (Contd)

PROGRAM ELEMENT LISTING
INTRODUCTION AND EXPLANATION OF CONTENTS

This section has been prepared for the purpose of providing summary program element budget information concerning the US Army Research, Development, Test and Evaluation Program. The listing is preceded by three summaries: the first by Research Categories (Program), the second by Budget Activities, and the third by FYDP Programs.

A separate document, Descriptive Summaries, furnishes detail by project. In addition, it furnishes narrative information on all Research, Development, Test and Evaluation (RDTE) program elements and projects of \$5.0 million or more. The index number in the right-hand column of this Program Element Listing refers to the appropriate page in the Descriptive Summaries. The funding information reflected in these volumes corresponds to that contained in the President's Budget except for FY 1981 and FY 1982. FY 1981 and FY 1982 in the Descriptive Summaries are restructured for comparability with the FY 1983 budget request.

A direct comparison of FY 1981, FY 1982, and FY 1983 data in this Program Element Listing with data submitted in the Program Element Listing dated January 1981 will reveal significant differences. Narrative explanation of these changes is included in the appropriate individual Program Element Descriptive Summary.

UNCLASSIFIED

UNCLASSIFIED

DEPARTMENT OF THE ARMY
FY 1983 R D T & E PROGRAM

EXHIBIT R-1

SUMMARY

DATE: 08 FEB 1982

THOUSANDS OF DOLLARS

	FY 1981	FY 1982	FY 1983	FY 1984
SUMMARY RECAP OF RESEARCH CATEGORIES				
RESEARCH	144,372	178,116	221,823	242,709
EXPLORATORY DEVELOPMENT	364,718	408,564	477,878	576,202
ADVANCED DEVELOPMENT	674,278	940,658	1,867,165	2,137,403
ENGINEERING DEVELOPMENT	1,230,593	1,160,016	1,039,866	1,120,078
MANAGEMENT AND SUPPORT	535,831	682,813	789,389	869,511
RESEARCH AND DEVELOPMENT (FYDP PROGRAM 6)	2,949,792	3,370,167	4,196,121	4,945,903
OPERATIONAL SYSTEMS DEVELOPMENT	174,482	239,368	287,879	338,631
TOTAL RESEARCH DEVELOPMENT TEST + EVAL, ARMY	3,124,274	3,609,535	4,484,000	5,284,734
SUMMARY RECAP OF BUDGET ACTIVITIES				
TECHNOLOGY BASE	509,090	586,680	699,701	818,911
ADVANCED TECHNOLOGY DEVELOPMENT	159,401	210,652	314,528	486,841
STRATEGIC PROGRAMS	266,632	462,109	919,001	869,305
TACTICAL PROGRAMS	1,568,778	1,572,970	1,678,959	2,108,900
INTELLIGENCE AND COMMUNICATIONS	42,395	47,157	73,056	109,311
DEFENSEWIDE MISSION SUPPORT	577,978	729,967	798,755	891,468
TOTAL RESEARCH DEVELOPMENT TEST + EVAL, ARMY	3,124,274	3,609,535	4,484,000	5,284,734
SUMMARY RECAP OF FYDP PROGRAMS				
STRATEGIC FORCES	3,200	19,252	48,447	58,376
GENERAL PURPOSE FORCES	132,060	159,316	184,983	190,935
INTELLIGENCE AND COMMUNICATIONS	39,222	60,800	54,449	84,520
RESEARCH AND DEVELOPMENT (FYDP PROGRAM 6)	2,949,792	3,370,167	4,196,121	4,945,903
TOTAL RESEARCH DEVELOPMENT TEST + EVAL, ARMY	3,124,274	3,609,535	4,484,000	5,284,734

UNCLASSIFIED

DEPARTMENT OF THE ARMY
FY 1983 R D T & E PROGRAM

EXHIBIT R-1

APPROPRIATION: 2040 A RESEARCH DEVELOPMENT TEST & EVAL, ARMY

DATE: 04 FEB 1982

PROGRAM LINE ELEMENT NO NUMBER	ITEM NOMENCLATURE	ACT	THOUSANDS OF DOLLARS				DESCRIPTIVE E SUMMARY C PAGE NUMBER
			FY 1981	FY 1982	FY 1983	FY 1984	
1 61101A	IN-HOUSE LAB INDEPENDENT RESEARCH	1	19,476	21,806	21,902	24,611 U	1-1
2 61102A	DEFENSE RESEARCH SCIENCES	1	124,896	156,610	189,921	218,098 U	1-8
3 62105A	MATERIALS	1	11,719	10,450	9,616	11,551 U	1-92
4 62111A	ATMOSPHERIC INVESTIGATIONS	1	6,208	5,534	5,046	6,995 U	1-98
5 62120A	FUZE/NUCLEAR WPNS EFFECTS/FLUIDICS	1	5,783	5,225	6,532	11,381 U	1-105
6 62201A	AIRCRAFT WEAPONS TECHNOLOGY	1	1,666	2,094	2,492	3,303 U	1-110
7 62202A	AIRCRAFT AVIONICS TECHNOLOGY	1	5,478	5,967	8,389	9,404 U	1-115
8 62209A	AERONAUTICAL TECHNOLOGY	1	18,208	18,044	24,349	27,642 U	1-123
9 62210A	AIRDROP TECHNOLOGY	1	1,188	1,540	1,688	2,144 U	1-130
10 62303A	MISSILE TECHNOLOGY	1	25,922	30,041	37,601	37,575 U	1-135
11 62307A	HIGH ENERGY LASER TECHNOLOGY	1	18,759	22,926	31,327	34,086 U	1-146
12 62601A	TANK AND AUTOMOTIVE TECHNOLOGY	1	11,421	14,648	19,925	26,500 U	1-151
13 62603A	LARGE CAL AND NUCLEAR TECHNOLOGY	1	26,521	19,750			1-158
14 62617A	SMALL CAL AND FIRE CNTRL TECHNOLOGY	1	12,117	11,470	9,902	12,216 U	1-163
15 62618A	BALLISTICS TECHNOLOGY	1	19,606	21,641	21,637	28,234 U	1-168
16 62622A	CHEMICAL MUNITIONS/CHEMICAL CMBT SPT	1	7,279	16,468	14,829	16,810 U	1-173
17 62623A	JOINT SERVICE SMALL ARMS PROGRAM (JSSAP)	1			3,706	2,113 U	1-187
18 62701A	COMMUNICATIONS TECH	1	8,067	7,545	9,719	8,931 U	1-191
19 62703A	CMBS SURV TARGET ACQ/ID	1	5,097	2,214	2,818	4,883 U	1-197
20 62704A	MIL ENVIRONMENTAL CRITERIA DEV	1	2,319	2,755	2,584	3,378 U	1-201
21 62705A	ELECTRICAL AND ELECTRONIC DEVICES	1	15,135	15,275	17,725	18,613 U	1-207

DEPARTMENT OF THE ARMY
FY 1983 R D T & E PROGRAM

EXHIBIT R-1

APPROPRIATION: 2040 A RESEARCH DEVELOPMENT TEST & EVAL, ARMY

DATE: 08 FEB 1982

THOUSANDS OF DOLLARS

PROGRAM LINE ELEMENT NO	PROGRAM NUMBER	ITEM NOMENCLATURE	ACT	FY 1981	FY 1982	FY 1983	FY 1984	DESCRIPTIVE E SUMMARY C	PAGE NUMBER
22	62706A	CHEM BIOLOGICAL DEF/GEN INVEST	1	13,168	22,899	29,568	48,316	U	1-213
23	62707A	MAPPING - GEODESY	1	5,020	5,750	6,830	8,962	U	1-218
24	62709A	NIGHT VISION INVESTIGATIONS	1	12,673	13,154	14,101	13,934	U	1-222
25	62715A	TACTICAL ELECTRONIC WARFARE TECHNOLOGY	1	8,854	9,707				1-226
26	62716A	HUMAN FACTORS ENGR IN SYS DEV	1	7,005	8,547	9,173	11,408	U	1-236
27	62717A	HUMAN PERFORMANCE EFFECT/SIMULATION	1	3,196	3,373	3,581	4,368	U	1-241
28	62719A	MOBILITY AND WEAPONS EFFECTS TECH	1	5,251	5,266	6,410	9,402	U	1-245
29	62720A	ENVIRONMENTAL QUALITY TECH	1	6,437	7,483	8,706	9,527	U	1-251
30	62722A	MANPOWER/PERSONNEL/TRAINING	1	6,203	5,922	7,370	8,610	U	1-257
31	62723A	CLOTHING EQUIP AND SHELTER TECH	1	5,371	5,574	6,970	7,281	U	1-262
32	62724A	JT SVC FOOD SYS TECH	1	8,852	5,556	5,595	7,012	U	1-274
33	62725A	COMPUTER AND INFORMATION SCIENCE	1	2,058	1,794	1,966	2,181	U	1-279
34	62727A	NON-SYSTEM TRAINING DEVICES	1	2,891	2,657	2,900	4,708	U	1-285
35	62730A	COLD REGIONS ENGINEERING TECHNOLOGY	1	4,262	5,443	6,660	8,988	U	1-290
36	62731A	MILITARY FACILITIES ENGINEERING TECHNOLOGY	1	3,735	3,397	4,250	4,422	U	1-295
37	62732A	RPV SUPPORTING TECHNOLOGY	1	1,456		1,688	3,447	U	1-300
38	62733A	MOBILITY EQUIPMENT TECHNOLOGY	1	10,007	10,164	11,278	12,717	U	1-305
39	62734A	MED DEFENSE AGAINST CHEM AGENTS	1	5,260	25,785	26,665	37,123	U	1-312
40	62746A	TACTICAL ADP TECH	1	7,024	8,029	7,078	6,003	U	1-317
41	62770A	MILITARY DISEASE HAZARDS TECH	1	18,194	17,115	24,979	29,805	U	1-325
42	62772A	COMBAT CASUALTY CARE TECH	1	15,495	6,749	6,682	8,486	U	1-337

UNCLASSIFIED

DEPARTMENT OF THE ARMY
FY 1983 R D T & E PROGRAM

EXHIBIT R-1

APPROPRIATION: 2040 A RESEARCH DEVELOPMENT TEST & EVAL, ARMY

DATE: 08 FEB 1982

PROGRAM LINE ELEMENT NO NUMBER	ITEM NOMENCLATURE	ACT	THOUSANDS OF DOLLARS				B E C	DESCRIPTIVE SUMMARY PAGE NUMBER
			FY 1981	FY 1982	FY 1983	FY 1984		
43 62775A	COMBAT MAXILLOFACIAL INJURY	1	818	1,473	2,619	3,044 U		1-341
44 62777A	SYSTEMS HEALTH HAZARD PREVENT TECH	1	12,548	13,863	16,066	21,388 U		1-345
45 62781A	ENERGY TECH APPL FOR MILITARY FACIL TECHNOLOGY BASE	1	1,438 509,080	1,977 586,680	1,891 689,701	2,102 U 818,911		1-359
46 63102A	MATERIALS SCALE-UP	2	4,056	3,988	7,478	16,061 U		1-363
47 63104A	FUELS AND LUBRICANTS	2	698	1,304	1,871	3,878 U		1-368
48 63201A	AIR-RAFT POWER PLANTS AND PROPULSION	2	3,868	2,863	8,660	33,804 U		1-372
49 63206A	AIRCRAFT WEAPONS	2	1,941	497	5,581	16,253 U		1-381
50 63207A	AIRCRAFT AVIONICS EQUIPMENT	2	3,698	2,312	4,494	6,888 U		1-390
51 63209A	AIR MOBILITY SUPPORT	2	247	1,809	3,784	7,464 U		1-394
52 63211A	ROTARY WING CONTROLS/ROTORS/STRUCTURES	2	12,308	28,438	33,809	45,458 U		1-401
53 63216A	SYNTHETIC FLIGHT SIMULATORS DEVELOPMENT	2	3,926	5,980	3,522	8,278 U		1-416
54 63218A	AIRDROP EQUIP AND TECHNIQUES	2	1,773	2,693	1,688	2,084 U		1-421
55 63220A	LIGHT HELIC ADVAN TECH DEMONSTRATION	2			944	14,060 U		1-425
56 63221A	NOE AVIATION AND NAVIGATION EQUIPMENT	2		2,338	1,899	8,932 U		1-429
57 63306A	TERMINALLY GUIDED PROJECTILES	2	10,774	1,997	6,814	23,610 U		1-434
58 63313A	MSL/ROCKET COMPONENTS	2	4,229	311	9,181	14,024 U		1-439
59 63314A	III ENERGY LASER COMPONENTS	2			33,116	42,581 U		1-446
60 63324A	HIGH TECHNOLOGY TEST BED	2			10,711	8,281 U		1-457
61 63602A	ADVANCED LAND MOB SYSTEMS CONCEPTS	2	34,008	9,217	7,787	30,888 U		1-465
62 63606A	LANDMINE WARFARE/BARRIER DEV	2	4,348	10,768	9,324	11,338 U		1-469

UNCLASSIFIED

DEPARTMENT OF THE ARMY
FY 1983 R D T & E PROGRAM

EXHIBIT R-1

APPROPRIATION: 2040 A RESEARCH DEVELOPMENT TEST & EVAL, ARMY

DATE: 08 FEB 1982

LINE NO	PROGRAM ELEMENT NUMBER	ITEM NOMENCLATURE	ACT	THOUSANDS OF DOLLARS				C	E	DESCRIPTIVE SUMMARY PAGE NUMBER
				FY 1981	FY 1982	FY 1983	FY 1984			
63	63607A	JOINT SERVICE SMALL ARMS PROGRAM (JSSAP)	2	1,899	8,487	3,468	3,934	U		1-476
64	63621A	COMBAT VEHICLE PROPULSION SYS	2	4,478	12,897	12,818	17,822	U		1-480
65	63631A	COMBAT VEH TURRET AND CHASSIS SUBSYS	2	3,228	7,854	11,146	12,838	U		1-488
66	63636A	COMBAT VEHICLE ARMOR/ANTI-ARMOR	2			10,888	11,233	U		1-496
67	63702A	ELECTRIC POWER SOURCES	2	3,082	8,072			U		---
68	63710A	NIGHT VISION ADVANCED DEVELOPMENT	2	17,888	38,817	30,224	34,818	U		1-504
69	63725A	REMOTELY PILOTED VEHICLES/DRONES	2	8,128	4,808	4,188	8,800	U		1-515
70	63731A	MANPOWER AND PERSONNEL	2	3,388	4,103	8,747	12,077	U		1-520
71	63732A	COMBAT MEDICAL MATERIAL	2	132	190			U		---
72	63734A	COMBAT ENGINEERING SYSTEMS	2		288	2,730	2,127	U		1-526
73	63737A	ANTI-RADIATION MSL COUNTER MEASURES	2							1-531
74	63739A	HUMAN FACTORS IN ING/OPER EFFECT	2	1,948	3,111	3,788	8,498	U		1-536
75	63742A	ADV ELECTRONIC DEVICES DEV	2		2,233	4,008	4,802	U		1-541
76	63743A	EDUCATION AND TRAINING	2	7,807	8,381	9,784	8,820	U		1-545
77	63744A	TRAINING SIMULATION	2	1,830	2,212	2,790	3,182	U		1-549
78	63747A	SOLDIER SUPPORT/SURVIVABILITY	2	3,842	3,134			U		---
79	63748A	ADV DEV OF AUTOMATIC TEST EQ/SYS	2	8,382	8,819	11,338	11,819	U		1-553
80	63749A	TECHNICAL VULNERABILITY REDUCTION	2	8,888	12,888	10,188	10,234	U		1-561
81	63750A	DRUG AND VACCINE DEVELOPMENT	2	4,788	8,073			U		---
82	63751A	MEDICAL DEFENSE AGAINST CHEM WARFARE	2		2,833			U		---
83	63752A	DEMILITARIZATION CONCEPTS	2		9,487	12,788	13,788	U		1-565

DEPARTMENT OF THE ARMY
FY 1983 RDT & E PROGRAM

EXHIBIT R-1

APPROPRIATION: 2040 A RESEARCH DEVELOPMENT TEST & EVAL, ARMY

DATE: 08 FEB 1982

LINE NO	PROGRAM ELEMENT NUMBER	ITEM NOMENCLATURE	ACT	THOUSANDS OF DOLLARS				DESCRIPTIVE SUMMARY PAGE NUMBER
				FY 1981	FY 1982	FY 1983	FY 1984	
84	63761A	ELEC WRFR VULN/SUSCEP TECH SUPPORT	2					1-569
85	63762A	ELECTRONIC WARFARE FEASIBILITY DEVELOPMENT	2			4,996	8,138 U	1-574
86	63763A	INDUSTRIAL BASE BIO WRFR VACCINES/DRUGS	2			4,951	5,354 U	1-578
87	63765A	NONTACTICAL ADP TECHNOLOGY	2			495	492 U	1-581
		ADVANCED TECHNOLOGY DEVELOPMENT		159,401	210,652	314,528	486,841	
88	63304A	BMD ADVANCED TECHNOLOGY	3	123,222	126,494	143,243	181,464 U	11-12
89	63308A	BALLISTIC MSL DEF SYS TECH	3	143,410	335,615	727,311	659,465 U	11-17
90	12814A	SPECIAL PROGRAM	3					11-1
91	12817A	MOBILE COMMAND CENTERS	3			4,961	49,248 U	11-4
92	12821A	CLASSIFIED PROGRAM	3					11-9
		STRATEGIC PROGRAMS		266,632	462,109	919,001	869,305	
93	6321DA	JOINT SURVIVABILITY INVESTIGATIONS	4	846	930	1,103	1,117 U	11-125
94	63222A	SPECIAL ELECTRONIC MISSION AIRCRAFT-X	4			498	14,259 U	11-130
95	63302A	HIGH-TO-MEDIUM AIR DEFENSE DEV	4			27,172	34,548 U	11-134
96	63303A	SURF-TO-SURF MSL ROCKET SYS	4	281	2,989	16,407	31,224 U	11-138
97	63307A	SHORT RANGE AIR DEF SELF PROT WPN	4	1			U	---
98	63316A	ADVANCED ROCKET CONTROL SYSTEM	4	21,178		27,869	53,992 U	11-145
99	63320A	CORPS SUPPORT WEAPON SYSTEM	4	14,294	10,727	6,103	22,465 U	11-148
100	63323A	LIGHT WEIGHT AIR DEFENSE SYSTEM	4			3,466	14,751 U	11-153
101	63604A	NUCLEAR MUNITIONS AND RADIACS	4	1,891	3,568			11-158

DEPARTMENT OF THE ARMY
FY 1983 R D T & E PROGRAM

EXHIBIT R-1

APPROPRIATION: 2040 A RESEARCH DEVELOPMENT TEST & EVAL, ARMY

DATE: 08 FEB 1982

PROGRAM LINE ELEMENT NO NUMBER	ITEM NOMENCLATURE	ACT	THOUSANDS OF DOLLARS				E C	DESCRIPTIVE SUMMARY PAGE NUMBER
			FY 1981	FY 1982	FY 1983	FY 1984		
102	63608A WEAPONS AND AMMUNITION (H)	4	1,899				U	---
103	63612A RATTLER	4	18,008		17,900	31,289	U	11-164
104	63615A LETHAL CHEMICAL MUNITIONS CONCEPTS	4	870	8,157	13,733	20,377	U	11-168
105	63619A LANDMINE/BARRIER SYS	4	2,830	8,050	4,595	18,832	U	11-173
106	63627A COMBAT SUPPORT MUNITIONS	4	3,384	3,149	2,700	13,700	U	11-177
107	63628A FIELD ARTILLERY AMMO DEV	4	11,905	24,647	23,951	32,623	U	11-181
108	63629A DIVISION SUPPORT WEAPONS SYSTEM	4	5,898	2,032	8,941	79,127	U	11-192
109	63632A ARMORED CMBT LOG SPT VEHICLE FAMILY	4	4,188	101		8,350	U	11-198
110	63633A TANK AND MORTAR AMMUNITION DEVELOPMENT	4			9,053	12,680	U	11-200
111	63635A MOBILE PROTECTED GUN	4		7,855	37,354	48,158	U	11-207
112	63702A ELECTRIC POWER SOURCES	4			2,998	8,187	U	11-221
113	63705A PHYSICAL SECURITY	4	2,289	3,813	5,452	8,897	U	11-226
114	63706A IDENTIFICATION-FRIEND OR FOE DEV	4	2,902	9,489	8,146	11,020	U	11-234
115	63707A COMMUNICATIONS DEVELOPMENT	4	21,668	8,318				11-241
116	63711A AIRCRAFT SURVIVABILITY EQUIPMENT	4	3,582	12,162	3,563	26,816	U	11-248
117	63713A ADDS-ARMY DATA DISTRIBUTION SYSTEM	4		18,864	32,886	19,857	U	11-254
118	63718A EW VULN/SUSC	4			26,164	32,199	U	11-259
119	63719A SPECIAL PURPOSE DETECTORS	4				8,865	U	---
120	63721A CHEMICAL DEFENSE MATERIEL CONCEPTS	4	17,383	20,028	26,542	28,798	U	11-278
121	63723A COMMAND AND CONTROL	4	13,880	20,839	22,133	41,232	U	11-290
122	63728A COMBAT SUPPORT EQUIPMENT	4	8,738	8,707	8,113	13,781	U	11-300

DEPARTMENT OF THE ARMY
FY 1963 R D T & E PROGRAM

EXHIBIT R-1

APPROPRIATION: 2040 A RESEARCH DEVELOPMENT TEST & EVAL, ARMY

DATE: 08 FEB 1962

LINE NO	PROGRAM ELEMENT NUMBER	ITEM NOMENCLATURE	ACT	THOUSANDS OF DOLLARS				DESCRIPTIVE SUMMARY PAGE NUMBER
				FY 1961	FY 1962	FY 1963	FY 1964	
123	63730A	TACTICAL SURVEILLANCE SYSTEM	4	10,282	14,984			11-309
124	63732A	COMBAT MEDICAL MATERIAL	4			224	260 U	11-311
125	63737A	ANTI-RADIATION MSL COUNTER MEASURES	4	4,343	5,305		U	---
126	63740A	DIV AIR DEFENSE COMD/CNTRL	4	12,029	9,171	4,399	5,344 U	11-317
127	63741A	METEOROLOGIC EQUIPMENT DEVELOPMENT	4				2,821 U	---
128	63745A	TAC ELECTRONIC SPT MEASURE SYS	4	14,575	13,911		U	11-324
129	63746A	SINGLE CHANNEL ORD/ABN RADIO SUB-SYS	4	20,088	13,582	17,862	U	11-328
130	63747A	SOLDIER SUPPORT/SURVIVABILITY	4			2,251	5,855 U	11-339
131	63750A	DRUG AND VACCINE DEVELOPMENT	4			5,795	12,857 U	11-344
132	63751A	MEDICAL DEFENSE AGAINST CHEM WARFARE	4			2,924	39,632 U	11-349
133	63753A	BATTLEFIELD DATA SYSTEMS	4			1,891	5,428 U	11-353
134	63755A	TAC ELEC C/H SYS	4	9,901	17,793			11-357
135	63764A	MEDICAL CHEM DEFENSE LIFE SUPPORT MAT	4			35,189	30,430 U	11-374
136	63766A	TACTICAL ELECTRONIC SURVEILLANCE SYS	4					11-378
137	64202A	AIRCRAFT WEAPONS	4	5,571	3,495	686	576 U	11-382
138	64204A	AIR MOBILITY SUPPORT EQUIPMENT	4	508	2,308	2,245	5,357 U	11-386
139	64206A	UH-60A BLACKHAWK	4		5,140	5,708	13,450 U	11-392
140	64207A	ADVANCED ATTACK HELICOPTER	4	172,941	91,574	33,725	39,448 U	11-401
141	64212A	COBRA TOW	4	2,487	19,816	12,245	4,419 U	11-419
142	64213A	CH-47 MODERNIZATION	4	570			U	---
143	64216A	AIRCRAFT PROPULSION SYSTEMS	4			1,007	4,317 U	11-425

DEPARTMENT OF THE ARMY
FY 1983 R D T & E PROGRAM

EXHIBIT R-1

APPROPRIATION: 2040 A RESEARCH DEVELOPMENT TEST & EVAL, ARMY

DATE: 08 Feb 1982

LINE NO	PROGRAM ELEMENT NUMBER	ITEM NOMENCLATURE	ACT	THOUSANDS OF DOLLARS				S E C	DESCRIPTIVE SUMMARY PAGE NUMBER
				FY 1981	FY 1982	FY 1983	FY 1984		
144	64217A	SYNTHETIC FLIGHT TRAINING SYSTEMS	4	580	3 063	30,951	21,053	U	11-479
145	64218A	AIRDROP EQUIP DEVELOPMENT	4	1,008	2,918	3,136	4,144	U	11-414
146	64220A	ARMY HELICOPTER IMPROVEMENT PROG	4	25,657	36,497	75,811	55,686	U	11-419
147	64221A	SURVEILLANCE SYSTEM	4		3,910	12,668	11,241	U	11-451
148	64222A	JOINT SERVICE ROTARY WING AIRCRAFT DEVEL	4			49,765	77,290	U	11-459
149	64258A	AIRCRAFT COMPONENT IMPROVEMENT PROGRAM	4			10,998	17,635	U	11-463
150	64306A	STINGER	4	5,657	16,121			U	11-468
151	64307A	PATRIOT (SAM-D)	4	75,382	57,612	47,075	66,075	U	11-469
152	64309A	ROLAND	4	12,613				U	11-495
153	64310A	HELIBORNE MISSILE-HELLFIRE	4	51,515	24,225	19,327	286	U	11-496
154	64311A	PERSHING II	4	149,077	150,580	111,301	23,598	U	11-515
155	64313A	GRASS BLADE	4	43,713	29,825	17,117	9,545	U	11-530
156	64314A	MULTIPLE LAUNCH ROCKET SYS	4	69,925	38,172	23,215		U	11-533
157	64316A	FIRE AND FORGET HELLFIRE	4	4,755				U	---
158	64318A	DIVISION AIR DEFENSE GUN	4	85,203	29,949	10,918		U	11-552
159	64321A	JOINT TACTICAL FUSION PROGRAM	4		30,417				11-568
160	64601A	INFANTRY SUPPORT WEAPONS	4	4,853	11,707	5,601	4,670	U	111-1
161	64603A	NUCLEAR MUNITIONS	4	13,163	33,920				111-10
162	64608A	ARMY SMALL ARMS PROGRAM	4	748	393			U	---
163	64609A	COMBAT SUPPORT SYSTEMS	4	707	3,037	2,640	4,431	U	111-24
164	64610A	LETHAL CHEMICAL MUNITIONS	4	75	2,169		3,616	U	111-28

UNCLASSIFIED

DEPARTMENT OF THE ARMY
FY 1983 R D T & E PROGRAM

EXHIBIT R-1

APPROPRIATION: 2040 A RESEARCH DEVELOPMENT TEST & EVAL, ARMY

DATE: 08 FEB 1982

LINE NO	PROGRAM ELEMENT NUMBER	ITEM NOMENCLATURE	ACT	THOUSANDS OF DOLLARS				S E C	DESCRIPTIVE SUMMARY PAGE NUMBER
				FY 1981	FY 1982	FY 1983	FY 1984		
165	64612A	COUNTERMINE AND BARRIERS	4	1,999	2,674	8,192	7,677	U	111-29
166	64614A	FLD ARTY WPNS/AMMO (105MM) (H)	4	341				U	---
167	64616A	FIGHTING VEHICLE SYS	4	41,651	103,393	50,488	33,612	U	111-39
168	64619A	LANDMINE WARFARE	4	11,133	4,843	9,701	7,459	U	111-55
169	64620A	TANK SYSTEMS	4	51,540	28,407	11,961		U	111-62
170	64621A	COPPERHEAD	4	6,026	3,294	2,075		U	111-76
171	64623A	VIPER (H)	4	7,774				U	---
172	64624A	HIGH MOBILITY MULTI-PURPOSE VEHICLE	4	4,670	3,013	2,743		U	111-85
173	64626A	FIRE INTEGRATION SPT TEAM VEH	4	8,432	9,600	6,926		U	111-90
174	64628A	INDIRECT FIRE TRAINING MUNITIONS	4		1,337		1,443	U	111-96
175	64630A	TANK GUN COOPERATIVE DEVELOPMENT	4	61,473	82,724	54,342	61,252	U	111-97
176	64631A	FLD ARTY AMMUNITION	4	2,243	1,460	2,873	15,824	U	111-114
177	64632A	105MM TANK AMMUNITION	4	5,005	5,195	1,059	7,938	U	111-119
178	64701A	COMM ENGINEERING DEV	4	5,909	8,865	11,705	14,004	U	111-124
179	64702A	JOINT TACTICAL INFO DISTRIBUTION SYSTEMS	4		15,854	14,556	12,472	U	111-132
180	64704A	UNATTENDED GROUND SENSORS	4	3,955	6,927	4,135		U	111-139
181	64705A	MODULAR INTEGRATED COMM AND NAVIGATION SYS	4		17,589	14,754	7,837	U	111-143
182	64706A	RADIOLOGICAL DEFENSE EQUIPMENT	4	318	308	838	968	U	111-147
183	64709A	IDENTIFICATION-FRIEND OR FOE EQ	4	1,410	2,418	2,660	4,793	U	111-152
184	64710A	NIGHT VISION DEVICES	4	4,369	5,328	4,931	5,777	U	111-157
185	64711A	AIRCRAFT SURVIVABILITY EQUIPMENT	4	12,842	14,406	20,335	17,018	U	111-161

UNCLASSIFIED

DEPARTMENT OF THE ARMY
FY 1983 R D T & E PROGRAM

EXHIBIT R-1

APPROPRIATION: 2040 A RESEARCH DEVELOPMENT TEST + EVAL, ARMY

DATE: 06 FEB 1982

LINE NO	PROGRAM ELEMENT NUMBER	ITEM NOMENCLATURE	ACT	THOUSANDS OF DOLLARS				E C	DESCRIPTIVE SUMMARY PAGE NUMBER
				FY 1981	FY 1982	FY 1983	FY 1984		
186	64712A	TACTICAL C3 SYSTEMS ENGINEERING	4	9,576	8,110	14,900	23,021	U	111-168
187	64713A	COMBAT FEEDING, CLOTHING AND EQUIPMENT	4	1,951	2,531	2,574	5,276	U	111-181
188	64714A	TACTICAL ELECTRICAL POWER SOURCES	4	3,081	1,533	1,805	5,962	U	111-186
189	64717A	GENERAL COMBAT SUPPORT	4	8,748	8,001	5,987	11,600	U	111-190
190	64718A	PHYSICAL SECURITY	4	6,147	5,781	6,099	6,157	U	111-197
191	64722A	EDUCATION AND TRAINING	4			995	4,723	U	111-203
192	64723A	SPECIAL PURPOSE DETECTORS	4	746				U	---
193	64724A	BIOLOGICAL DEFENSE MATERIEL	4	2,047	1,034	391		U	111-207
194	64725A	CHEMICAL DEFENSE MATERIEL	4	17,423	37,898	26,017	46,268	U	111-212
195	64727A	COMMAND AND CONTROL	4	19,584	14,965	13,650	26,486	U	111-230
196	64730A	REMOTELY PILOTED VEHICLES	4	56,689	73,094	77,849	110,138	U	111-243
197	64740A	TACTICAL SURVEILLANCE SYSTEM	4	2,486	4,696				111-262
198	64745A	TAC ELECTRONIC SPT MEASURE SYS	4	29,007	7,780			U	---
199	64746A	AUTOMATIC TEST SUPPORT SYSTEMS	4		4,983	2,940	6,812	U	111-267
200	64748A	STANDOFF TARGET ACQUISITION SYSTEM	4	57,488				U	---
201	64760A	TAC ELEC C/H SYS	4	5,250	5,821				111-270
202	64761A	SINGLE CHANNEL ORD/ABN RADIO SUB ENO	4				16,872	U	---
203	64763A	BATTLEFIELD DATA SYSTEMS	4			27,868	43,333	U	111-276
204	64767A	MEDICAL CHEMICAL DEFENSE LIFE SPT MAT	4				4,938	U	---
205	64768A	DRUG AND VACCINE DEVELOPMENT	4				4,938	U	---
206	64766A	TACTICAL ELECTRONIC SURVILLANCE SYS	4						111-281

UNCLASSIFIED

DEPARTMENT OF THE ARMY
FY 1983 R O T & E PROGRAM

EXHIBIT R-1

APPROPRIATION: 2040 A RESEARCH DEVELOPMENT TEST & EVAL, ARMY

DATE: 08 FEB 1982

LINE NO	PROGRAM ELEMENT NUMBER	ITEM NOMENCLATURE	ACT	THOUSANDS OF DOLLARS				B E C	DESCRIPTIVE SUMMARY PAGE NUMBER
				FY 1981	FY 1982	FY 1983	FY 1984		
207	64779A	JT INTEROPERABILITY TAC COMD/CNTRL	4	23,176	29,466	30,066	48,036	U	111-286
208	65710A	JOINT CB CONTACT POINT AND TEST	4	729	1,413	1,451	2,216	U	111-307
209	23724A	HV ANTI-TANK ASSAULT WPN SYS (TOW)	4	22,731	6,669	1,981	1,967	U	11-23
210	23726A	ADV FIELD ARTY TAC DATA SYS	4	2,129	6,956	7,224	28,446	U	11-29
211	23730A	CHAPARRAL	4	22,906	19,616	26,381	24,816	U	11-36
212	23731A	SAM HAWK/HAWK IMP PROG	4	9,481	39,436	37,971	87,126	U	11-46
213	23733A	LANCE (NNL) WARHEAD (H)	4	707				U	---
214	23735A	COMBAT VEHICLE IMPROVE PROG	4	20,322	29,396	46,786	49,637	U	11-53
215	23739A	AN/TSQ-73 MODIFICATIONS	4	1,330	832	1,026		U	11-65
216	23740A	MAN/VEH CONTROL SYSTEM (MCS)	4	7,677	14,826	14,847	9,898	U	11-69
217	23741A	PROD IMPR VULCAN AIR DEF SYS	4	9,481				U	---
218	23742A	COMMUNICATIONS SYSTEM ENGINEERING PROGRAM	4			1,486	1,669	U	11-75
219	28010A	JT TACTICAL COMM PROG	4	38,084	42,986	47,184	62,816	U	11-79
220	33142A	SATCOM GROUND ENVIRONMENT	4	23,562	41,624			U	---
221	33148A	EUCOM C3 SYSTEMS	4	1,133	4,016	527	4,948	U	11-121
		TACTICAL PROGRAMS		1,668,776	1,672,970	1,678,658	2,108,900		
222	63712A	MAPPING AND GEODESY	6	1,899	1,042	3,424	1,086	U	111-346
223	64201A	AIRCRAFT AVIONICS	6	4,811	11,503	3,789	20,302	U	111-352
224	64716A	MAPPING AND GEODESY	6	309	100		3,699	U	111-358

UNCLASSIFIED

DEPARTMENT OF THE ARMY
FY 1983 R D T & E PROGRAM

EXHIBIT R-1

APPROPRIATION: 2040 A RESEARCH DEVELOPMENT TEST & EVAL, ARMY

DATE: 06 FEB 1982

LINE NO.	PROGRAM ELEMENT NUMBER	ITEM NOMENCLATURE	ACT	THOUSANDS OF DOLLARS				E C	DESCRIPTIVE SUMMARY PAGE NUMBER
				FY 1981	FY 1982	FY 1983	FY 1984		
225	64778A	NAVSTAR GLOBAL POS SYS (USER EQ)	8	17,849		11,911	4,773	U	111-366
226	12814A	SPECIAL PROGRAM	5						---
227	31022A	SCIENTIFIC AND TECH INTELLIGENCE (H)	8						---
228	31307A	FOREIGN SCIENCE AND TECHNOLOGY CENTER	8						111-311
229	31327A	TECHNICAL RECONN AND SURVEILLANCE	8						111-315
230	33111A	STRATEGIC ARMY COMMUNICATIONS	8	884	788	812	954	U	111-319
231	33126A	LONG-HAUL COMMUNICATIONS (DCS)	8	7,287	7,480	7,578	7,492	U	111-323
232	33142A	SATCOM GROUND ENVIRONMENT	8			35,545	67,043	U	111-327
233	33401A	COMMUNICATIONS SECURITY	8	8,118	8,948				111-341
		INTELLIGENCE AND COMMUNICATIONS		42,395	47,187	73,056	108,311		
234	63718A	EW VULNERABILITY/SUSCEPTIBILITY	8	17,429	22,228			U	---
235	63738A	NON-SYSTEM TRAINING DEVICES	8	1	1,380		8,343	U	111-377
236	64268A	ACFT ENGINE COMPONENT IMPROVE PROG	8	8,579	11,808			U	---
237	64715A	NON-SYSTEM TNG DEVICES ENOR	8	12,211	11,253	8,645	18,084	U	111-379
238	64728A	METEOROLOGICAL EQUIPMENT SYSTEMS	8	4,858	2,099	2,172	1,778	U	111-388
239	65102A	TRADOC STUDIES AND ANALYSES	8	1,400	1,843	3,287	9,428	U	111-394
240	65201A	AVIATION ENGINEERING FLIGHT ACTIVITY	8	4,385	8,432	5,781	8,714	U	111-400
241	65301A	KWAJALEIN MISSILE RANGE	8	125,478	139,351	182,140	181,801	U	111-404
242	65702A	SUPPORT OF DEVELOPMENT TESTING	8	22,804	38,135	43,180	58,377	U	111-409
243	65706A	MATERIEL SYSTEMS ANALYSIS	8	9,874	12,435	13,166	14,218	U	111-422
244	65709A	EXPLOITATION OF FOREIGN ITEMS	8	1,480	1,953	2,021	2,737	U	111-427

UNCLASSIFIED

DEPARTMENT OF THE ARMY
FY 1983 R D T & E PROGRAM

EXHIBIT R-1

APPROPRIATION: 2040 A RESEARCH DEVELOPMENT TEST & EVAL, ARMY

DATE: 08 FEB 1982

LINE NO	PROGRAM ELEMENT NUMBER	ITEM NOMENCLATURE	AC/	THOUSANDS OF DOLLARS				S E C	DESCRIPTIVE SUMMARY PAGE NUMBER
				FY 1981	FY 1982	FY 1983	FY 1984		
245	65/12A	SUPPORT OF OPERATIONAL TESTING	6	38,119	42,584	50,106	60,283	U	111-432
246	65/15A	DEFENSE SYSTEMS MANAGEMENT COLLEGE	6	1,144	203	202	201	U	111-451
247	65801A	PROGRAM-WIDE ACTIVITIES	6	51,693	63,591	70,101	72,037	U	111-454
248	65802A	INTL COOPERATIVE RESEARCH AND DEV	6	845	980	1,041	1,093	U	111-463
249	65803A	TECHNICAL INFO ACTIVITIES	6	3,588	4,628	5,249	6,179	U	111-468
250	65804A	DARCOM MAJOR RANGE/TEST FACIL	6	239,981	278,874	300,671	337,847	U	111-474
251	65805A	MUNITIONS STANDARDIZATION EFFECT AND SAFETY	6	5,776	7,083	8,047	10,734	U	111-497
252	65806A	DOD HIGH ENERGY LASER SYSTEMS TEST FAC	6		40,224	34,030	32,177	U	111-507
253	65807A	MAINSITE	6			17,119	36,585	U	111-513
254	65872A	PRODUCTIVITY INVESTMENT FUNDING	6		3,889	34,139	21,688	U	111-517
255	65890A	INSTL AUDIOVISUAL SPT (R/D)	6		2,276	2,244	2,408	U	111-526
256	65898A	MOT HQ (RESEARCH/DEVELOPMENT)	6	30,788	39,717	45,304	49,007	U	111-529
		DEFENSEWIDE MISSION SUPPORT		677,978	729,967	798,755	891,466		
TOTAL RESEARCH DEVELOPMENT TEST & EVAL, ARMY				3,124,274	3,609,535	4,484,000	5,284,734		

UNCLASSIFIED

UNCLASSIFIED

DEPARTMENT OF THE ARMY RESEARCH, DEVELOPMENT, TEST AND EVALUATION, ARMY PERFORMER DISTRIBUTION (\$ in Thousands)

Section 3

Appropriation: Research, Development, Test and Evaluation, Army

	Total Obligational Authority			
	FY 1981	FY 1982	FY 1983	FY 1984
1. For operation of installations of the reporting DOD Component Government operated	1,254,572	1,434,791	1,656,285	1,955,118
2. For operation of installations of the reporting DOD Component Contractor operated	67,905	77,694	94,574	111,503
3. For contracts directly in support of work actually performed at installations of the reporting DOD Component	251,827	265,238	282,148	332,652
4. For work assigned to other Department of Defense activities	163,812	185,966	228,175	269,018
5. For work assigned to activities of other Government agencies	26,137	26,911	27,414	28,786
6. For work performed by industrial contractors ("profit" organizations)	1,248,014	1,485,304	2,046,548	2,414,777
7. For work performed by educational institutions				
a. Designated Federal Contract Research Centers	16,130	18,409	20,033	21,730
b. Other Institutions	64,803	81,947	91,612	109,914
8. For work performed by other "non-profit" organizations				
a. Designated Federal Contract Research Centers	8,852	10,851	13,427	16,020
b. Other Institutions	22,022	22,804	23,784	25,683
9. Total Research, Development, Test and Evaluation, Army Appropriation	3,124,274	3,609,515	4,484,000	5,284,734

UNCLASSIFIED

UNCLASSIFIED

**DEPARTMENT OF THE ARMY
RESEARCH, DEVELOPMENT, TEST AND EVALUATION, ARMY
INSTALLATION ANALYSIS - IN-HOUSE**

Section 4

This installation analysis indicates the resources of dollars and manpower utilized by Army installations in the accomplishment of the in-house research, development, test and evaluation effort, including contractor operated installations, under the management control of the Army. Installations reported include both installations classified as research, development, or test installations and research, development, or test units located at multi-mission installations. Funds being reported cover both direct costs and indirect or support costs. These funds are a part of project costs shown in the budget for the various projects. The amounts reflected under the category "RDTE Funds" include funds received directly through command channels, and reimbursable RDTE effort performed for other Army activities and other Department of Defense agencies. "All Other Funds" reflect the in-house effort at multi-mission installations for other than Research, Development, Test and Evaluation, Military Construction and Military Personnel costs. Military Personnel costs reflect those military personnel assigned to RDTE activities and other military personnel located at the installation in support of non-RDTE activities at multi-mission posts.

The personnel reflected includes spaces assigned and charged directly to the RDTE appropriation as reflected in the personnel summary and spaces assigned to Army Industrial Fund installations operated with RDTE funds. Contractor personnel shown are engaged in direct support or operation of Army installations.

UNCLASSIFIED

UNCLASSIFIED

Section 4 (Contd)

INSTALLATION ANALYSIS - IN-HOUSE

INDEX

<u>Item No.</u>	<u>Installation</u>	<u>Page No.</u>
<u>Army Industrial Fund Installations</u>		
1.	Aberdeen Proving Ground, Aberdeen, Maryland	29
2.	Armament Research and Development Command, Dover, New Jersey.	29
3.	Army Material and Mechanics Research Center, Watertown, Massachusetts	29
4.	Benet Weapons Laboratory, Watervliet, New York.	30
5.	Harry Diamond Laboratories, Adelphi, Maryland	30
6.	Missile Research and Development Command, Redstone Arsenal, Alabama	30
<u>Army Non-Industrial Fund Installations</u>		
7.	Aberdeen Proving Ground, Aberdeen, Maryland	31
8.	Aeromedical Research Laboratory, Ft. Rucker, Alabama.	31
9.	Air Defense Board, Ft. Bliss, Texas	31
10.	Airborne Board, Ft. Bragg, North Carolina	31
11.	Armament Research and Development Command, Dover, New Jersey.	32
12.	Armor and Engineer Board, Ft. Knox, Kentucky.	32
13.	Army Communicative Technical Office, Ft. Eustis, Virginia	32
14.	Army Engineer Flight Activity, Edwards Air Force Base, California	33
15.	Army Materiel Development and Readiness Command, Alexandria, Virginia	33
16.	Army Research Office, Research Triangle Park, North Carolina.	33
17.	Atmospheric Science Laboratory, White Sands Missile Range, Las Cruces, New Mexico	34
18.	Aviation Development Test Activity, Ft. Rucker, Alabama	34
19.	Aviation Research and Development Command, St. Louis, Missouri.	34
20.	Aviation Test Board, Ft. Rucker, Alabama.	35
21.	Avionics Research and Development Activity, Ft. Monmouth, New Jersey.	35
22.	Ballistic Missile Defense Advanced Technology Center, Huntsville, Alabama	35

UNCLASSIFIED

UNCLASSIFIED

Section 4 (Contd)

INSTALLATION ANALYSIS - IN-HOUSE

INDEX

<u>Item No.</u>	<u>Installation</u>	<u>Page No.</u>
<u>Army Non-Industrial Fund Installations</u>		
23.	Ballistic Missile Defense Program Office, Alexandria, Virginia.	16
24.	Ballistic Missile Defense Systems Command, Huntsville, Alabama.	16
25.	Cold Regions Research and Engineering Laboratory, Hanover, New Hampshire.	16
26.	Cold Regions Test Center, Ft. Greeley, Alaska	17
27.	Communications and Electronics Board, Ft. Gordon, Georgia	17
28.	Communications and Electronics Command, Ft. Monmouth, New Jersey.	17
29.	Computer Systems Command, Ft. Belvoir, Virginia	18
30.	Construction Engineering Research Laboratory, Champaign, Illinois,	11
31.	Corps of Engineer RDTE Headquarters Activities, Washington, DC.	18
32.	DARCOM Research and Development Field Support Activity, Ft. Hood, Texas	19
33.	Dugway Proving Ground, Dugway, Utah	19
34.	Electronic Proving Ground, Ft. Huachuca, Arizona.	19
35.	Electronics Research and Development Command, Adelphi, Maryland	40
36.	Engineer Topographic Laboratory, Ft. Belvoir, Virginia.	40
37.	Engineer Waterway Experimental Station, Vicksburg, Mississippi.	40
38.	Field Artillery Board, Ft. Sill, Oklahoma	41
39.	Foreign Science and Technology Center, Charlottesville, Virginia.	41
40.	Infantry Board, Ft. Benning, Georgia.	41
41.	Institute of Surgical Research, Ft. Sam Houston, Texas.	42
42.	Intelligence and Security Test Board, Ft. Huachuca, Arizona	42
43.	Joint Tactical Fusion (FM), Vint Hill Farms, Virginia	42
44.	Joint Tactical Information Distribution System, Hanscom Air Force Base, Massachusetts	43
45.	Kwajalein Missile Range, Marshall Islands	43
46.	Letterman Army Institute of Research, San Francisco, California	43

UNCLASSIFIED

UNCLASSIFIED

Section 4 (Contd)

INSTALLATION ANALYSIS - IN-HOUSE

INDEX

Item No.	Installation	Page No.
<u>Army Non-Industrial Fund Installations</u>		
47.	Liaison Field Offices, Various Locations (ARI)	44
48.	Liaison Field Offices, Various Locations (DARCOM)	44
49.	Medical Research and Development Command, Ft. Detrick, Maryland	44
50.	Medical Research Institute of Chemical Defense, Aberdeen, Maryland.	45
51.	Mobility Equipment Research and Development Command, Ft. Belvoir, Virginia.	45
52.	Natick Laboratories, Natick, Massachusetts.	45
53.	Night Vision and Electro-Optics Laboratory, Ft. Belvoir, Virginia	46
54.	Research Institute for Behavioral Sciences, Alexandria, Virginia.	46
55.	Research and Technology Laboratory, Moffett Field, California	46
56.	Signal Warfare Laboratory, Vint Hill Farms, Virginia.	47
57.	Standardization Group, Australia.	47
58.	Standardization Group, Canada	47
59.	Standardization Group, Germany.	47
60.	Standardization Group, United Kingdom	48
61.	Tank Automotive Research and Development Command, Warren, Michigan.	48
62.	Tropic Test Center, Panama Canal Zone, Panama	48
63.	Walter Reed Army Institute of Research, Washington, DC.	49
64.	White Sands Missile Range, Las Cruces, New Mexico	49
65.	Yuma Proving Ground, Yuma, Arizona.	49

UNCLASSIFIED

UNCLASSIFIED

Section 4 (Cont'd)

INSTALLATION ANALYSIS - IN-HOUSE

TOA (\$ In Thousands)										PERSONNEL (Man-Years)							
		RDTE Funds			All		Mil. Pers.			Civil Service		Contractor			Mil. Pers.		
		Mgmt	Other	Other	Other	Sub-				Paid	Paid			Paid			
Installation and Location	FY	Bureau	Army	DOD	Funds	Total	RDTE	Other	Total	From Army	From Other	From Other	From Other	From Other	RDTE	In	
Army Industrial Fund Installations																	
1.																	
Aberdeen	81	53214	15758	1818	1173	71983	2232	-	74215	1423	52	8	39	-	106	-	
Proving	82	66912	16000	1875	1200	86007	2829	-	88836	1451	45	8	35	-	116	-	
Ground, Aberdeen, Maryland	83	67461	16500	1875	1200	87036	2868	-	89904	1451	45	8	36	-	116	-	
	84	78404	16500	1875	1200	97979	2881	-	100860	1451	45	8	49	-	116	-	
2.																	
Armament	81	81173	43188	10129	-	134490	2401	105	136996	3230	315	-	-	-	114	5	
Research and	82	87297	42810	6835	-	136942	1951	122	139015	3237	315	-	-	-	80	5	
Development	83	92412	40430	6925	-	139767	1978	124	141869	3242	310	-	-	-	80	5	
Command, Dover, New Jersey	84	102544	39030	6950	-	148524	1987	149	150660	3340	315	-	-	-	80	6	
3.																	
Army Material and Mechanics	84	18800	8087	191	3540	30818	274	-	31092	473	9	111	1	-	13	-	
Research	82	19689	9000	450	3680	32819	415	-	33234	473	9	124	1	-	17	-	
Center, Watertown, Massachusetts	83	24667	9500	500	3790	38457	420	-	38877	473	9	124	1	-	17	-	
	84	23251	9800	600	3800	37451	422	-	37873	473	9	124	1	-	17	-	

^{1/} Exclusive of Military Personnel and Military Construction.

* ARRAIDCOM AIF located on the Aberdeen Installation, includes Ballistic Research Laboratory and Chemical Systems Laboratory.

UNCLASSIFIED

UNCLASSIFIED

Section 4 (Contd)

INSTALLATION ANALYSIS - IN-HOUSE

		TOA (\$ in Thousands)								PERSONNEL (Man-Years)								
Installation and Location	FY	RDTE Funds			All Other Funds ^{1/}	Sub- Total	Mil. Pers.			Civil Service		Contractor					Mil. Pers.	Total
		Mgmt Bureau	Other Army	Other DOD			RDTE	Other	Total	Paid	Paid	Paid	Paid	Paid	In			
										From	From	From	From	From	RDTE			
										Army	Other	Other	RDTE	Funds	Work			
Army Indus- trial Fund Installations																		
4.																		
Benet Weapons	81	10575	-	130	-	10705	21	-	10726	133	2	-	-	-	1	-	136	
Laboratory,	82	10975	-	140	-	11115	24	-	11139	133	2	-	-	-	1	-	136	
Watervliet,	83	12075	-	150	-	12225	25	-	12250	133	2	-	-	-	1	-	136	
New York	84	13275	-	150	-	13425	25	-	13450	133	2	-	-	-	1	-	136	
5.																		
Harry Diamond	81	10922	20271	4666	9961	45820	63	63	45946	691	121	310	-	-	3	3	11	
Laboratories,	82	10096	21373	6283	9989	45741	73	73	45887	710	171	258	-	-	3	3	114	
Adelphi,	83	17374	18931	4636	6174	47115	74	74	47263	833	120	186	-	-	3	3	1145	
Maryland	84	18110	18177	5065	6701	48053	75	75	48203	826	124	189	-	-	3	3	1145	
6.																		
Missile	81	69385	4643	2684	352	77064	2317	84	79465	1194	43	-	-	-	110	4	1351	
Research and	82	71221	6614	2449	320	80604	2097	98	82799	1079	41	-	-	-	86	4	1210	
Development	83	68088	7699	2642	325	78754	2052	148	80954	1069	41	-	-	-	83	6	1202	
Command,	84	72327	10019	4690	350	87386	2012	199	89597	999	48	-	-	-	81	8	1136	
Redstone Arsenal, Alabama																		
Subtotal Army	81	244069	91947	19838	15026	370880	7308	252	378440	7144	542	429	40	-	347	12	8514	
Industrial	82	266210	95797	18032	11189	393228	7389	293	400910	7083	583	390	36	-	303	12	8407	
Fund	83	287077	93060	16728	11489	403154	7417	346	411117	7201	530	318	37	-	300	14	8400	
	84	307911	93526	19330	12051	4328.8	7402	423	440643	7222	543	321	50	-	298	17	8451	

1/ Exclusive of Military Personnel and Military Construction.

UNCLASSIFIED

Section 4 (Contd)

INSTALLATION ANALYSIS - IN-HOUSE

		TOA (\$ in Thousands)								PERSONNEL (Man-Years)								
		RDTE Funds			All Other Funds ^{1/}	Sub-Total	Mil. Pers.		Total	Civil	Service	Contractor			Mil.	Pers.		
		Mgmt	Other	Other			Rdte	Other		Rdte	Other	From Army	Paid From Other	Paid From Other	Paid From Other	In RDTE	Other	Total
Installation and Location	FY	Bureau	Army	DOD														
7. Army Non-Industrial Fund Installations																		
Aberdeen	81	92447	19416	1658	69376	182897	8397	6009	197303	2426	-	1786	125	205	503	160	5405	
Proving	82	131889	21713	1832	75144	230578	9844	1928	248350	2593	-	1772	215	225	519	418	5742	
Ground, Aber-	83	123875	19939	3285	75236	222335	10194	8179	240708	2524	-	1726	230	225	521	418	5644	
deen, Maryland	84	159196	20219	3200	75236	257871	10243	8218	276332	2528	-	1726	230	225	521	418	5648	
8.																		
Aeromedical	81	3303	436	41	-	3780	1431	-	5211	69	-	-	-	-	77	-	146	
Research	82	4720	-	-	-	4720	1686	-	6406	63	-	-	-	-	78	-	141	
Laboratory,	83	5064	-	-	-	5064	1715	-	6779	73	-	-	-	-	78	-	151	
Ft. Rucker, Alabama	84	6222	-	-	-	6222	1723	-	7945	73	-	-	-	-	78	-	151	
9.																		
Air Defense	81	2965	692	35	348	4040	2072	-	6112	85	-	-	-	-	117	-	202	
Board, Ft.	82	3101	235	-	275	3611	2110	-	5921	85	-	-	-	-	112	-	197	
Bliss, Texas	83	3083	250	-	-	3333	2154	-	5687	85	-	-	-	-	112	-	197	
	84	3172	275	40	85	3572	2165	-	5917	85	-	-	-	-	112	-	197	
10.																		
Aliborne	81	1810	38	19	229	2096	1771	-	3867	40	-	-	-	-	100	-	140	
Board, Ft.	82	1496	-	-	-	1496	2062	-	3558	40	-	-	-	-	100	-	140	
Bragg, North	83	1494	-	-	-	1494	2108	-	3602	40	-	-	-	-	100	-	140	
Carolina	84	1590	-	-	-	1590	2112	-	3702	40	-	-	-	-	100	-	140	

1/ Exclusive of Military Personnel and Military Construction.

UNCLASSIFIED

UNCLASSIFIED

Section 4 (Contd)

INSTALLATION ANALYSIS - IN-HOUSE

TOA (\$ in Thousands)										PERSONNEL (Man-Years)								
Installation and Location	FY	RDTE Funds			All Other Funds ^{1/}	Sub- Total	Mil. Pers.			Civil Service	Contractor			Mil.	Pers.	Total		
		Mgmt Bureau	Other Army	Other DOD			RDTE	Other	Total	Paid	Paid	Paid	Paid	Paid				
										From Army RDTE	From Other RDTE	From Other	From Other RDTE	From Other RDTE	From Other RDTE		From Other RDTE	From Other RDTE
Army Non-Industrial Fund Installations																		
11.																		
Armament	81	5644	25	215	-	5884	250	81	6217	100	4	-	-	-	15	5	124	
Research and	82	6494	-	275	-	6769	285	171	7225	117	5	-	-	-	15	9	146	
Development	83	5628	-	285	-	5913	196	176	6285	100	5	-	-	-	10	9	124	
Command, Dover, New Jersey	84	6169	-	150	-	6519	197	177	6893	106	5	-	-	-	10	9	11	
12.																		
Armor and	81	4880	4908	-	-	9788	4021	-	13809	98	-	-	-	-	227	-	325	
Engineer	82	5726	1000	-	-	6726	4743	-	11469	88	-	-	-	-	230	-	318	
Board, Ft.	83	6059	500	-	-	6559	4771	-	11330	88	-	-	-	-	227	-	315	
Knox, Kentucky	84	5583	500	-	-	6083	4794	-	10877	88	-	-	-	-	227	-	315	
13.																		
Army Communica-	81	601	-	-	-	601	33	-	634	12	-	-	-	-	2	-	14	
tive Technical	82	775	-	-	-	775	38	-	813	11	-	-	-	-	2	-	13	
Office, Ft.	83	945	-	-	-	945	19	-	984	11	-	-	-	-	2	-	13	
Eustis, Virginia	84	945	-	-	-	945	19	-	984	11	-	-	-	-	2	-	13	

1/ Exclusive of Military Personnel and Military Construction.

UNCLASSIFIED

UNCLASSIFIED

ction 4 (Contd)

INSTALLATION ANALYSIS - IN-HOUSE

		TOA (\$ in Thousands)								PERSONNEL (Man-Years)									
		RDTE Funds			All Other Funds ^{1/}	Sub- Total	Mil. Pers.		Total	Civil Service		Contractor			Mil. Pers.				
		Mgmt	Other	Other			RDTE	Other		Paid	Paid	Paid	Paid	Paid	Paid	In RDTE	Work	Other	Total
Installation and Location	FY	Bureau	Army	DOD						Rdte	Rdte								
Army Non-Industrial Fund Installations																			
14.																			
Army Engineer	81	4433	1324	81	19	5857	935	-	6792	106	-	-	-	-	56	-	162		
Flight Activ-	82	5443	1206	14	20	6683	1252	-	7935	110	-	-	-	-	66	-	176		
ity, Edwards	83	5705	1250	15	20	6990	1291	-	8281	110	-	-	-	-	66	-	176		
Air Force Base, California	84	6617	1300	-	-	7917	1298	-	9215	110	-	-	-	-	66	-	176		
15.																			
my Materiel	81	5646	-	-	-	5646	734	-	6380	133	-	-	-	-	44	-	177		
velopment &	82	6141	-	-	-	6141	854	-	6995	143	-	-	-	-	45	-	188		
Readiness	83	7672	-	-	-	7672	881	-	8553	143	-	-	-	-	45	-	188		
Command, Alexandria, Virginia	84	8198	-	-	-	8198	885	-	9281	143	-	-	-	-	45	-	188		
16.																			
Army Research	81	4843	-	-	-	4843	33	-	4876	95	-	-	-	-	2	-	97		
Office, Re-	82	5900	-	-	-	5900	38	-	5938	95	-	-	-	-	2	-	97		
search Tri-	83	6600	-	-	-	6600	39	-	6639	95	-	-	-	-	2	-	97		
angle Park, North Carolina	84	7600	-	-	-	7600	39	-	7639	95	-	-	-	-	2	-	97		

^{1/} Exclusive of Military Personnel and Military Construction.

UNCLASSIFIED

UNCLASSIFIED

Section 4 (Contd)

INSTALLATION ANALYSIS - IN-HOUSE

TOA (\$ in Thousands)										PERSONNEL (Man-Years)							
Installation and Location	FY	RDTE Funds			All Other Funds ^{1/}	Sub-Total	Mil. Pers.			Civil	Service	Contractor			Mil. Pers.		
		Mgmt Bureau	Other Army	Other DOD			RDTE	Other	Total	Paid From Army	Paid From Other	Paid From Other	Paid From Other	Paid From Other	In RDTE	Work	Other	Total
Army Non-Industrial Fund Installations																	
17.																	
Atmospheric	81	9764	240	61	22	10087	2137	-	12224	195	1	-	-	-	128	-	324
Science Labor-	82	9936	150	75	20	10181	2428	-	12609	200	1	-	-	-	128	-	329
atory, White	83	11526	150	74	20	11770	1252	-	13022	210	1	-	-	-	64	-	295
Sands Missile	84	12831	150	75	20	13076	-	-	13076	255	1	-	-	-	-	-	256
Range, Las Cruces, New Mexico																	
18.																	
Aviation	81	6678	1621	-	6091	14390	2738	-	17128	94	-	-	-	-	164	-	258
Development	82	7581	1270	-	5646	14497	2959	-	17456	94	-	-	-	-	156	-	250
Test Activity,	83	8623	-	-	4304	12927	2465	-	15392	94	-	-	-	-	126	-	220
Ft. Rucker, Alabama	84	10119	-	-	4800	14919	2477	-	17396	94	-	-	-	-	126	-	220
19.																	
Aviation	81	21082	3484	25	2395	26986	751	1085	28822	525	1	60	-	-	45	65	696
Research and	82	20394	2966	43	2588	25991	835	1347	28173	452	1	74	-	-	44	71	642
Development	83	21485	3195	45	3763	28488	861	1389	30738	437	1	68	-	-	44	71	621
Command, St. Louis, Missouri	84	23324	3156	55	3672	30207	865	1396	32468	444	1	61	-	-	44	71	621

1/ Exclusive of Military Personnel and Military Construction.

UNCLASSIFIED

UNCLASSIFIED

Section 4 (Contd)

INSTALLATION ANALYSIS - IN-HOUSE

		TOA (\$ in Thousands)								PERSONNEL (Man-Years)							
		RDTE Funds			All		Mil. Pers.			Civil Service		Contractor		Mil. Pers.			
Installation and Location	FY	Mgmt Bureau	Other Army	Other DOD	Other Funds ^{1/}	Sub-Total	RDTE	Other	Total	From Army RDTE	From Other RDTE	Paid From Other	Paid From RDTE	From Other Funds	In RDTE Work	Other	Total
<u>Army Non-Industrial Fund Installations</u>																	
20.																	
Aviation Test Board, Ft. Rucker, Alabama	81	2869	667	-	-	3536	1399	-	4935	36	-	-	-	-	79	-	115
	82	1861	-	-	-	1861	1629	-	3490	36	-	-	-	-	79	-	115
	83	1805	-	-	-	1805	1660	-	3465	36	-	-	-	-	79	-	115
	84	2080	-	-	-	2080	1668	-	3748	36	-	-	-	-	79	-	115
21.																	
Avionics Research and Development Activity, Ft. Monmouth, New Jersey	81	5470	7905	208	-	13583	267	217	14067	345	3	-	-	-	16	13	377
	82	6289	7856	570	-	14715	322	209	15246	332	5	-	-	-	17	11	365
	83	6134	8152	580	-	14866	313	254	15433	332	5	-	-	-	16	13	366
	84	6484	8177	590	-	15451	315	256	16022	332	5	-	-	-	16	13	366
22.																	
Ballistic Missile Defense Advanced Technology Center, Huntsville, Alabama	81	4819	-	-	-	4819	210	-	5029	103	-	-	-	-	8	-	111
	82	5560	-	-	-	5560	243	-	5803	103	-	-	-	-	8	-	111
	83	5836	-	-	-	5836	244	-	6080	103	-	-	-	-	8	-	111
	84	6128	-	-	-	6128	245	-	6373	103	-	-	-	-	8	-	111

1/ Exclusive of Military Personnel and Military Construction.

UNCLASSIFIED

UNCLASSIFIED

Section 4 (Contd)

INSTALLATION ANALYSIS - IN-HOUSE

TOA (\$ in Thousands)										PERSONNEL (Man-Years)							
Installation and Location		RDTE Funds			All		Mil. Pers.			Civil Service		Contractor			Mil. Pers.		
		Mgmt	Other	Other	Other	Sub-	RDTE	Other	Total	Paid	Paid	Paid	Paid	Paid	In		
										From Army	From Other	From Other	From Other	From RDTE	Total		
FY		Bureau	Army	DOD	Funds	Total				RDTE	RDTE	Other	RDTE	Funds	Work	Other	Total
<u>Army Non-Industrial Fund Installations</u>																	
23.																	
Ballistic Mis-	81	470	-	-	-	470	316	-	786	13	-	-	-	-	12	-	25
site Defense	82	555	-	-	-	555	365	-	920	13	-	-	-	-	12	-	25
Program Office,	83	575	-	-	-	575	366	-	941	13	-	-	-	-	12	-	25
Alexandria, Virginia	84	595	-	-	-	595	368	-	963	13	-	-	-	-	12	-	25
24.																	
Ballistic Mis-	81	8113	-	-	-	8113	658	-	8771	211	-	-	-	-	25	-	236
site Defense	82	10076	-	-	-	10076	942	-	11018	253	-	-	-	-	31	-	284
Systems	83	11919	-	-	-	11919	1465	-	13384	334	-	-	-	-	48	-	382
Command, Huntsville, Alabama	84	12776	-	-	-	12776	1472	-	14248	334	-	-	-	-	48	-	382
25.																	
Cold Regions	81	4452	495	256	3702	8905	301	-	9206	187	3	77	-	-	14	-	281
Research and	82	5935	735	300	3855	10825	350	-	11175	187	3	77	-	-	14	-	281
Engineering	83	6589	680	350	5640	13259	353	-	13612	187	3	77	-	-	14	-	281
Laboratory, Hanover, New Hampshire	84	7185	700	350	6000	14235	355	-	14590	187	3	77	-	-	14	-	281

1/ Exclusive of Military Personnel and Military Construction.

UNCLASSIFIED

UNCLASSIFIED

Section 4 (Contd)

INSTALLATION ANALYSIS - IN-HOUSE

		TOA (\$ In Thousands)								PERSONNEL (Man-Years)							
		RDTE Funds			All		Mil. Pers.			Civil	Service	Contractor			Mil. Pers.		
		Mgmt	Other	Other	Other	Sub				Paid	Paid	Paid	Paid	From	In		
Installation and Location	FY	Bureau	Army	DOD	Funds	Total	RDTE	Other	Total	RDTE	RDTE	Other	RDTE	Funds	Work	Other	Total
Army Non-Industrial Fund Installations																	
26.																	
Cold Regions	81	4956	342	-	-	5298	4390	-	9688	22	-	-	-	-	263	-	285
Test Center,	82	5877	250	-	-	6127	4988	-	11115	22	-	-	-	-	263	-	285
Ft. Greeley,	83	6396	832	-	-	7228	5146	-	12374	22	-	-	-	-	263	-	285
Alaska	84	7127	675	-	-	7802	5171	-	12973	22	-	-	-	-	263	-	285
27.																	
Communications	81	1470	19	-	158	1647	1045	-	2692	31	-	-	-	-	59	-	90
and Electro-	82	1892	-	-	319	2211	1382	-	3593	32	-	-	-	-	67	-	99
nics Board,	83	1399	-	-	174	1573	1408	-	2981	31	-	-	-	-	67	-	98
C. Gordon,	84	1139	-	-	-	1139	1415	-	2554	31	-	-	-	-	67	-	98
Georgia																	
28.																	
Communications	81	84205	10729	3062	12005	110001	5192	-	115393	1524	41	249	82	-	323	-	2219
and Electro-	82	101602	10760	3528	14301	132191	6530	-	138621	1579	35	245	82	-	339	-	2280
nics Command,	83	125139	10951	3566	14722	154378	6614	-	160992	1588	34	247	82	-	338	-	2289
Ft. Monmouth,	84	145260	11305	3717	15402	175684	6606	-	182290	1572	35	249	82	-	336	-	2274
New Jersey																	

1/ Exclusive of Military Personnel and Military Construction.

UNCLASSIFIED

UNCLASSIFIED

Section 4 (Contd)

INSTALLATION ANALYSIS - IN-HOUSE

TOA (\$ in Thousands)										PERSONNEL (Man-Years)								
Installation and Location	FY	RDTE Funds			All Other Funds ^{1/}	Sub-Total	Mil. Pers.			Civil Service		Contractor		Mil. Pers.		Total		
		Mgmt Bureau	Other Army	Other DOD			RDTE	Other	Total	Paid From Army	Paid From Other	Paid From	Paid From	Paid Other	Paid In RDTE			
Army Non-Industrial Fund Installations																		
29.																		
Computer	81	901	-	-	-	901	191	-	1094	20	-	-	-	-	7	-	27	
Systems	82	902	-	-	-	902	191	-	1093	21	-	-	-	-	6	-	27	
Command,	83	952	-	-	-	952	192	-	1144	21	-	-	-	-	6	-	27	
Ft. Belvoir, Virginia	84	997	-	-	-	997	191	-	1190	21	-	-	-	-	6	-	27	
30.																		
Construction	81	7929	4153	1139	358	13579	86	-	13665	182	-	-	-	-	4	-	186	
Engineering	82	8550	4680	1200	120	14550	199	-	14749	182	-	-	-	-	8	-	190	
Research	83	12464	5065	1035	300	18864	277	-	19091	182	-	-	-	-	9	-	191	
Laboratory, Champaign, Illinois	84	12309	4800	1000	250	18359	253	-	18612	182	-	-	-	-	10	-	192	
31.																		
Corps of	81	495	-	-	-	495	21	-	516	11	-	-	-	-	1	-	12	
Engineer RDTE	82	657	-	-	-	657	25	-	682	11	-	-	-	-	1	-	12	
Headquarters	83	522	-	-	-	522	25	-	547	11	-	-	-	-	1	-	12	
Activities, Washington, DC	84	560	-	-	-	560	25	-	585	11	-	-	-	-	1	-	12	

1/ Exclusive of Military Personnel and Military Construction.

UNCLASSIFIED

UNCLASSIFIED

Section 4 (Contd)

INSTALLATION ANALYSIS - IN-HOUSE

		TOA (\$ in Thousands)							PERSONNEL (Man-Years)								
		RDTE Funds			All		Mil. Pers.		Civil Service		Contractor		Mil. Pers.				
		Mgmt	Other	Other	Other ^{1/}	Sub-	RDTE	Other	Total	Paid	Paid	Paid	Paid	From	In		
Installation and Location	FY	Bureau	Army	DOD	Funds	Total	RDTE	Other	Total	From Army RDTE	From Other RDTE	From Other	From RDTE	From Funds	Work	Other	Total
<u>Army Non-Industrial Fund Installations</u>																	
32.																	
DARCOM	81	425	2844	-	-	3269	50	-	3319	5	-	-	-	-	3	-	8
Research and Development	82	403	-	-	-	403	76	-	479	9	-	-	-	-	4	-	13
Field Support Activity, Ft. Hood, Texas	83	1121	-	-	-	1121	78	-	1199	9	-	-	-	-	4	-	13
	84	571	-	-	-	571	79	-	650	9	-	-	-	-	4	-	13
33.																	
Dugway	81	20026	6827	759	2200	29832	3689	-	33501	652	-	11	280	-	221	-	1164
Proving Ground, Utah	82	29186	7280	2590	1900	40956	3262	-	44218	652	-	11	161	-	172	-	996
	83	29289	7463	2995	2365	42112	3366	-	45478	652	-	11	228	-	172	-	1063
	84	34721	10279	3444	3033	51477	3382	-	54859	652	-	11	228	-	172	-	1063
34.																	
Electronic Proving Ground, Ft. Huachuca, Arizona	81	14212	10037	4095	367	28717	8964	2270	39951	189	40	46	201	43	537	136	1194
	82	27923	11116	5115	407	44561	10185	2580	57326	189	40	46	225	49	537	136	1222
	83	36430	12637	5965	447	55479	10507	2661	68647	189	40	46	249	49	537	136	1246
	84	57193	13473	6027	492	77185	10557	2674	90416	189	40	46	249	49	537	136	1246

1/ Exclusive of Military Personnel and Military Construction.

UNCLASSIFIED

UNCLASSIFIED

Section 4 (Contd)

INSTALLATION ANALYSIS - IN-HOUSE

		TOA (\$ in Thousands)							PERSONNEL (Man Years)									
		RDTE Funds			All		Mil. Pers.		Civil Service		Contractor		Mil. Pers.					
		Mgmt	Other	Other	Other	Sub-				Paid	Paid							
		Bureau	Army	DOD	Funds	Total	RDTE	Other	Total	From Army	From Other	From	From	From	In	RDTE		
Installation and Location		FY								RDTE	RDTE	Other	RDTE	Funds	Work	Other	Total	
Army Non-Industrial Fund Installations																		
35.																		
Electronics	81	10727	568	-	-	11295	417	-	11712	247	-	-	-	-	25	-	272	
Research and	82	12792	600	-	-	13392	588	-	13980	249	-	-	-	-	31	-	280	
Development	83	12418	600	-	-	13018	410	-	13428	236	-	-	-	-	22	-	258	
Command, Adelphi, Maryland	84	12921	600	-	-	13521	433	-	13954	236	-	-	-	-	22	-	258	
36.																		
Engineer Topographic Laboratory, Ft. Belvoir, Virginia	81	6296	1594	2495	8	10393	150	172	10715	165	114	-	-	-	7	8	294	
	82	7321	1246	2601	20	11188	175	199	11562	171	106	-	-	-	7	8	294	
	83	8120	1406	2596	-	12122	176	202	12500	180	99	-	-	-	7	8	294	
	84	9026	1513	2678	-	13217	177	203	13597	191	88	-	-	-	7	8	294	
37.																		
Engineer Waterway Experimental Station, Vicksburg, Mississippi	81	5811	6188	9242	9029	30270	107	42	30419	290	223	218	-	-	5	2	738	
	82	7344	6300	10000	9100	32744	125	49	32918	305	223	203	-	-	5	2	738	
	83	9140	6500	10200	9300	35140	126	50	35316	325	212	194	-	-	5	2	738	
	84	10188	6800	10500	9600	37288	127	51	37466	336	206	189	-	-	5	2	738	

1/ Exclusive of Military Personnel and Military Construction.

UNCLASSIFIED

UNCLASSIFIED

(Contd)

INSTALLATION ANALYSIS - IN-HOUSE

TOA (\$ in Thousands)										PERSONNEL (Man-Years)							
Installation and Location	FY	RDTE Funds			All Other Funds ^{1/}	Sub-Total	Mil. Pers.		Total	Civil Service		Contractor		Mil. Pers.			
		Mgmt Bureau	Other Army	Other DOD			RDTE	Other		Paid From Army	Paid From Other	Paid From	Paid From	Paid From	Paid In		
										RDT E	RDT E	Other	RDT E	Funds	Work	Other	Total
38.																	
Field	81	1465	79	-	172	1716	2522	-	4238	37	-	-	-	-	142	-	179
Artillery	82	1676	-	-	-	1676	3733	-	5409	37	-	-	-	-	181	-	218
Board, Ft.	83	1271	-	-	-	1271	3195	-	4466	37	-	-	-	-	152	-	189
Sill, Oklahoma	84	1144	-	-	-	1144	3210	-	4354	37	-	-	-	-	152	-	189
39.																	
Foreign	81	107	-	-	-	107	17	-	124	3	-	-	-	-	1	-	4
Science and	82	127	-	-	-	127	19	-	146	3	-	-	-	-	1	-	4
Technology	83	131	-	-	-	131	20	-	151	3	-	-	-	-	1	-	4
Center, Charlottesville, Virginia	84	139	-	-	-	139	20	-	159	3	-	-	-	-	1	-	4
40.																	
Infantry	81	2106	-	-	356	2662	2001	-	4663	54	-	-	-	-	113	-	167
Board,	82	1964	-	-	165	2129	2516	-	4645	55	-	-	-	-	122	-	177
Ft. Benning, Georgia	83	2222	-	-	145	2367	2564	-	4911	55	-	-	-	-	122	-	177
	84	2216	-	-	195	2431	2576	-	5007	55	-	-	-	-	122	-	177

1/ Exclusive of Military Personnel and Military Construction.

UNCLASSIFIED

UNCLASSIFIED

Section 4 (Contd)

INSTALLATION ANALYSIS - IN-HOUSE

TOA (\$ in Thousands)										PERSONNEL (Man Years)								
Installation and Location	FY	RDTE Funds			All Other Funds ^{1/}	Sub-Total	Mil. Pers.			Civil	Service	Contractor			Mil. Pers.			
		Mgmt Bureau	Other Army	Other DOD			RDTE	Other	Total	Paid From Army	Paid From Other	Paid From Other	Paid From Other	Paid In RDTE	Work	Other	Total	
										RDTE	RDTE	Other	RDTE	Funds				
Army Non-Industrial Fund Installations																		
41.																		
Institute of Surgical Research, Ft. Sam Houston, Texas	81	2061	-	-	1061	3122	2825	-	5947	77	-	-	-	-	152	-	279	
	82	2602	-	-	250	2852	1786	-	6138	80	-	-	-	-	152	-	232	
	83	2758	-	-	275	3033	1141	-	6374	80	-	-	-	-	152	-	232	
	84	3065	-	-	300	3365	1357	-	6722	80	-	-	-	-	152	-		
42.																		
Intelligence and Security Test Board, Ft. Huachuca, Arizona	81	1092	48	-	140	1280	1647	-	2927	22	-	-	2	-	93	-	117	
	82	3759	-	-	731	4490	2015	-	6525	24	-	-	2	-	98	-	124	
	83	1943	-	-	1500	3443	2060	-	5503	24	-	-	2	-	98	-	124	
	84	2739	-	-	2200	4939	2069	-	7008	24	-	-	2	-	98	-	124	
43.																		
Joint Tactical Fusion (PM), Vint Hill Farms, Virginia	81	613	-	-	-	613	134	-	747	10	-	-	-	-	8	-	18	
	82	392	-	-	-	392	171	-	563	11	-	-	-	-	9	-	20	
	83	1492	-	-	-	1492	191	-	1883	33	-	3	-	-	20	-	56	
	84	1530	-	-	-	1530	413	19	2022	42	-	3	-	-	21	4	70	

^{1/} Exclusive of Military Personnel and Military Construction.

UNCLASSIFIED

UNCLASSIFIED

Section 4 (Contd)

INSTALLATION ANALYSIS - IN-HOUSE

TOA (\$ in Thousands)										PERSONNEL (Man-Years)								
Installation and Location		FY	RDTE Funds			All		Mil. Pers.		Civil Service		Contractor			Mil. Pers.			
			Mgmt Bureau	Other Army	Other DOD	Other Funds	Sub-Total	RDTE	Other	Total	Paid From Army	Paid From Other	Paid From Other	Paid From Other	In RDTE			
Army Non-Industrial Fund Installations																		
44.																		
Joint Tactical Information Distribution System,	81	528	-	-	-	528	50	-	578	11	-	-	-	-	3	-	14	
	82	445	-	-	-	445	114	-	559	10	-	-	-	-	6	-	16	
	83	479	-	-	-	479	117	-	596	10	-	-	-	-	6	-	16	
	84	515	-	-	-	515	118	-	633	10	-	-	-	-	6	-	16	
Hanscom Air Force Base, Massachusetts																		
45.																		
Kwajalein	81	80255	8195	10285	70	98805	842	-	99647	132	-	-	2688	269	32	-	3121	
Missile Range, Marshall Islands	82	89175	13360	10165	35	112735	971	-	113708	132	-	-	2728	297	32	-	3189	
	83	93275	19990	13005	-	126270	977	-	127247	132	-	-	2715	326	32	-	3205	
	84	99185	8070	13750	-	121005	981	-	121986	132	-	-	2745	241	32	-	3150	
46.																		
Letterman Army Institute of Research, San Francisco, California	81	5685	972	-	-	6657	2955	-	9612	108	-	-	61	7	159	-	335	
	82	5714	562	-	317	6613	3480	-	10091	105	-	-	58	7	161	-	331	
	83	6104	565	-	421	7090	3519	-	10629	117	-	-	58	7	161	-	343	
	84	7598	550	-	451	8599	3556	-	12155	117	-	-	58	6	161	-	342	

1/ Exclusive of Military Personnel and Military Construction.

UNCLASSIFIED

UNCLASSIFIED

Section 4 (Contd)

INSTALLATION ANALYSIS - IN-HOUSE

TOA (\$ in Thousands)										PERSONNEL (Man-Years)								
Installation and Location		FY	RDTE Funds			All Other Funds	Sub-Total	Mil. Pers.		Civil Service		Contractor			Mil. Pers.			
			Hgmt Bureau	Other Army	Other DOD			RDTE	Other	Paid From Army	Paid From Other	Paid From Other	Paid From Other	Paid From Other	Paid From Other			
Army Non-Industrial Fund Installations																		
47.																		
Liaison Field	81	5526	-	-	-	5526	400	-	5926	128	-	-	-	-	17	-	145	
Offices,	82	5628	-	-	-	5628	490	-	6118	128	-	-	-	-	18	-	146	
Various	83	5565	-	-	-	5565	494	-	6059	128	-	-	-	-	18	-	146	
Locations (ARI)	84	5704	-	-	-	5704	497	-	6201	128	-	-	-	-	18	-	146	
48.																		
Liaison Field	81	1520	-	-	-	1520	601	-	2121	33	-	-	-	-	36	-	69	
Offices,	82	1818	-	-	-	1818	683	-	2501	39	-	-	-	-	36	-	75	
Various	83	2223	-	-	-	2223	704	-	2927	41	-	-	-	-	36	-	77	
Locations (DARCOM)	84	2329	-	-	-	2329	708	-	3037	41	-	-	-	-	36	-	77	
49.																		
Medical	81	55731	621	52	455	56859	7527	-	64386	382	-	-	-	-	405	-	787	
Research and	82	79680	215	3	-	79898	8841	-	88739	415	-	-	-	-	409	-	824	
Development	83	148640	-	3	-	148643	8925	-	157568	419	-	-	-	-	406	-	825	
Command, Ft. Detrick, Maryland	84	224457	-	-	-	224457	8967	-	233424	425	-	-	-	-	406	-	831	

1/ Exclusive of Military Personnel and Military Construction.

UNCLASSIFIED

UNCLASSIFIED

Section 4 (Contd)

INSTALLATION ANALYSIS - IN-HOUSE

		TOA (\$ in Thousands)								PERSONNEL (Man-Years)							
		RDTE Funds			All Other Funds ^{1/}	Sub-Total	Mil. Pers.		Total	Civil Service		Contractor		Mil. Pers.		Total	
		Mgmt Bureau	Other Army	Other DOD			RDTE	Other		Paid From Army	Paid From Other	Paid From RDTE	Paid From Other Funds	In Work	Other		
Installation and Location	FY																
Army Non-Industrial Fund Installations																	
50.																	
Medical	81	7116	176	-	45	7337	1394	-	8731	136	-	-	-	75	-	211	
Research	82	8668	400	-	-	9068	1621	-	10689	137	-	-	-	75	-	212	
Institute of Chemical	83	9189	425	-	-	9614	1649	-	11263	145	-	-	-	75	-	220	
Defense, Aberdeen, Maryland	84	10108	450	-	-	10558	1657	-	12215	145	-	-	-	75	-	220	
51.																	
Mobility Equipment	81	12601	7100	1500	200	21401	1235	-	22636	861	16	2	-	74	-	953	
Research and Development	82	15385	6700	1200	200	23485	1404	-	24889	848	11	2	-	74	-	937	
Command, Ft. Belvoir, Virginia	83	16910	7000	1000	200	25110	1448	-	26558	850	11	2	-	74	-	937	
	84	18536	7000	1000	200	26736	1455	-	28191	849	11	3	-	74	-	937	
52.																	
Natick Laboratories, Natick, Massachusetts	81	26835	980	298	337	28450	3158	81	31691	871	4	16	-	180	5	1076	
	82	28893	1019	336	354	30604	3628	95	34327	859	4	14	-	180	5	1062	
	83	28409	1058	354	372	30193	3738	98	34029	865	4	14	-	181	5	1069	
	84	31265	1109	370	390	33134	3755	98	36987	865	4	14	-	181	5	1069	

1/ Exclusive of Military Personnel and Military Construction.

UNCLASSIFIED

UNCLASSIFIED

Section 4 (Contd)

INSTALLATION ANALYSIS - IN-HOUSE

TOA (\$ in Thousands)										PERSONNEL (Man-Years)							
Installation and Location	FY	RDTE Funds			All Other Funds ^{1/}	Sub- Total	Mil. Pers.			Civil Service		Contractor			Mil. Pers.		
		Mgmt	Other	Other			RDTE	Other	Total	Paid From Army	Paid From Other	Paid From Other	Paid From Other	Paid From Other	In RDTE Work	Other	Total
		Bureau	Army	DOD						RDT	RDT	Other	RDT	Funds			
53.																	
Night Vision	81	14610	2374	510	3376	20870	534	-	21404	382	5	50	-	-	12	-	469
and Electro-	82	15450	2500	560	3700	22210	607	-	22817	382	5	50	-	-	12	-	469
Optics Labora-	83	16129	2500	560	3700	22889	626	-	23515	382	5	50	-	-	12	-	469
tory, Ft.	84	16834	2500	560	3700	23594	629	-	24223	382	5	50	-	-	12	-	469
Belvoir, Virginia																	
54.																	
Research	81	9517	-	-	1	9520	353	-	9873	191	-	-	-	-	15	-	206
Institute for	82	11244	-	-	-	11244	381	-	11625	205	-	-	-	-	14	-	219
Behavioral	83	11509	-	-	-	11509	384	-	11893	222	-	-	-	-	14	-	236
Sciences,	84	11874	-	-	-	11874	386	-	12260	222	-	-	-	-	14	-	236
Alexandria, Virginia																	
55.																	
Research and	81	18971	4883	2049	-	25903	284	-	26187	526	-	-	-	-	17	-	543
Technology	82	20295	3660	519	-	24474	327	-	24796	526	-	-	-	-	17	-	543
Laboratory,	83	21225	4026	571	-	25822	333	-	26155	527	-	-	-	-	17	-	544
Hoffett Field, California	84	21856	4118	752	-	26726	334	-	27060	527	-	-	-	-	17	-	544

^{1/} Exclusive of Military Personnel and Military Construction.

UNCLASSIFIED

UNCLASSIFIED

Section 4 (Contd)

INSTALLATION ANALYSIS - IN-HOUSE

TOA (\$ In Thousands)										PERSONNEL (Man-Years)							
Installation and Location	FY	RDTE Funds			All Other Funds ^{1/}	Sub-Total	Mil. Pers.			Civil Service		Contractor		Mil. Pers.			Total
		Mgmt Bureau	Other Army	Other DOD			RDTE	Other	Total	Paid From Army	Paid From Other RDTE	Paid From	Paid From	In RDTE	Other		
Army Non-Industrial Fund Installations																	
56.																	
Signal Warfare	81	1726	125	1749	2212	5812	114	214	6180	31	38	66	2	2	8	14	161
Laboratory,	82	1974	132	2143	2122	6771	152	266	7189	33	41	62	2	2	8	14	162
Vint Hill	83	2138	139	2793	2518	7588	157	274	8019	34	42	60	-	-	8	14	158
Farms, Virginia	84	2399	146	3072	2616	8233	157	275	8665	36	44	56	-	-	8	14	158
57.																	
Standard-	81	16	-	-	-	16	11	-	49	-	-	-	-	-	2	-	2
ization Group,	82	17	-	-	-	17	18	-	55	-	-	-	-	-	2	-	2
Australia	83	21	-	-	-	21	19	-	60	-	-	-	-	-	2	-	2
	84	20	-	-	-	20	19	-	59	-	-	-	-	-	2	-	2
58.																	
Standard-	81	48	-	-	-	48	11	-	81	2	-	-	-	-	2	-	4
ization Group,	82	53	-	-	-	53	18	-	91	2	-	-	-	-	2	-	4
Canada	83	55	-	-	-	55	19	-	94	2	-	-	-	-	2	-	4
	84	59	-	-	-	59	19	-	98	2	-	-	-	-	2	-	4
59.																	
Standard-	81	159	-	-	-	159	50	-	209	3	-	-	-	-	3	-	6
ization Group,	82	186	-	-	-	186	57	-	243	3	-	-	-	-	3	-	6
Germany	83	249	-	-	-	249	59	-	308	3	-	-	-	-	3	-	6
	84	254	-	-	-	254	59	-	313	3	-	-	-	-	3	-	6

1/ Exclusive of Military Personnel and Military Construction.

UNCLASSIFIED

UNCLASSIFIED

Section 4 (Contd)

INSTALLATION ANALYSIS - IN-HOUSE

TOA (\$ in Thousands)										PERSONNEL (Man-Years)							
Installation and Location		RDTE Funds			All Other Funds ^{1/}	Sub-Total	Mil. Pers.			Civil Service	Contractor			Mil. Pers.			
		Hent Bureau	Other Army	Other DOD			RDTE	Other	Total	Paid From Army	Paid From Other	Paid From	Paid From	Paid From	Paid From		
										RDT	RDT	RDT	RDT	RDT	RDT		
FY																	
Army Non-Industrial Fund Installations																	
60.																	
Standard-	81	1193	~	~	~	1193	117	~	1310	14	~	~	~	~	7	~	21
ization Group,	82	1406	~	~	~	1406	113	~	1539	14	~	~	~	~	7	~	21
United Kingdom	83	1537	~	~	~	1537	137	~	1674	14	~	~	~	~	7	~	21
	84	1681	~	~	~	1681	138	~	1819	14	~	~	~	~	7	~	21
61.																	
Tank Automotive	81	18158	2895	335	~	21388	885	33	22306	502	7	152	~	~	53	2	716
Research and	82	18757	951	1809	~	21517	854	38	22409	474	44	152	~	~	45	2	717
Development	83	21310	570	1057	~	22937	881	39	23857	523	24	152	~	~	45	2	746
Command, Warren, Michigan	84	21779	273	636	~	22688	727	39	23454	503	13	152	~	~	37	2	707
62.																	
Tropic Test	81	2913	89	1	87	3090	1235	~	4325	87	~	~	5	~	74	~	166
Gen. ex, Panama	82	3344	130	2	98	3574	1328	~	4902	86	~	~	5	~	70	~	161
Canal Zone,	83	3750	187	3	160	4100	1370	~	5470	86	~	~	7	~	70	~	163
Panama	84	4055	142	3	121	4321	1376	~	5697	89	~	~	8	~	70	~	167

1/ Exclusive of Military Personnel and Military Construction.

UNCLASSIFIED

UNCLASSIFIED

Section 4 (Contd)

INSTALLATION ANALYSIS IN-HOUSE

TOA (\$ in Thousands)										PERSONNEL (Man-Years)							
		RDTE Funds			All		Mil. Pers.			Civil Service		Contractor			Mil. Pers.		
Installation and Location	FY	Mgmt Bureau	Other Army	Other DOD	Other Funds ^{1/}	Sub-Total	RDTE	Other	Total	Paid From Army	Paid From Other RDTE	Paid From Other	Paid From RDTE	Paid From Other Funds	In Work	Other	Total
Army Non-Industrial Fund Installations																	
63.																	
Walter Reed	81	22234	418	-	-	22652	9218	-	31870	417	-	-	-	-	496	-	913
Army Institute of Research,	82	24917	314	74	42	25347	10851	-	36198	437	-	-	-	-	502	-	919
Washington, DC	83	26188	114	74	3	26579	10882	-	37461	455	-	-	-	-	495	-	950
	84	32749	314	74	3	33140	10955	-	44095	461	-	-	-	-	496	-	957
64.																	
White Sands Missile Range,	81	131229	30145	11316	1819	174509	14206	-	188715	2676	336	23	1157	-	851	-	5043
Las Cruces,	82	188147	38298	8575	1656	236676	16274	-	252950	2728	318	23	1181	-	858	-	5108
New Mexico	83	175873	45472	8687	1694	231726	16788	-	248514	2726	321	23	1347	-	858	-	5275
	84	218582	49028	8730	1995	278335	16868	-	295203	2723	324	23	1347	-	858	-	5275
65.																	
Yuma Proving Ground, Yuma,	81	26883	14900	1115	1140	44038	5275	-	49313	773	-	10	113	-	316	-	1212
Arizona	82	12251	21935	1311	1188	56685	5994	-	62679	773	-	10	155	-	316	-	1254
	83	37053	21938	3185	1696	63872	6183	-	70055	773	-	10	168	-	316	-	1267
	84	45427	30748	3504	1696	81375	6213	-	87588	773	-	10	168	-	316	-	1267

1/ Exclusive of Military Personnel and Military Construction.

UNCLASSIFIED

UNCLASSIFIED

Section 4 (Contd)

INSTALLATION ANALYSIS - IN-HOUSE

Installation and Location		TOA (\$ in Thousands)							PERSONNEL (Man-Years)									
		RDTE Funds			All		Mil. Pers.			Civil Service	Contractor			Mil. Pers.				
										Paid	Paid							
		Mgmt	Other	Other	Other	Sub-	RDTE	Other	Total	From Army	From Other	From Other	From Other	From Other	In	RDTE	Other	Total
	FY	Bureau	Army	DOD	Funds	Total												
Subtotal Army	81	798846	158552	52601	112780	1127779	112621	10228	1250670	16680	836	2766	4718	526	6455	610	32591	
Non-Industrial	82	1010308	169539	55042	124773	1359662	130814	12882	1503378	16985	844	2741	4814	580	6528	676	33168	
Fund	83	1121655	181754	62283	128975	1496667	131902	13322	1641891	17167	807	2683	5086	607	6408	678	33436	
	84	1367565	188590	64477	132457	1753089	131137	13466	1897692	17217	785	2670	5117	521	6337	682	33329	
Total, In-house	81	1042915	250499	72439	132806	1498659	119931	10480	1629070	21824	1378	3195	4758	526	6802	622	41105	
	82	1276518	265336	73074	137962	1752890	138223	13175	1904288	24068	1427	3131	4850	580	6831	688	41575	
	83	1403732	276814	79011	140464	1900021	139119	13668	2053008	24368	1337	3001	5123	507	6708	692	41836	
	84	1675476	282116	81807	144508	2185907	138539	13889	2338315	24439	1328	2991	5167	21	6635	699	41780	

1/ Exclusive of Military Personnel and Military Construction.

UNCLASSIFIED

UNCLASSIFIED

DEPARTMENT OF THE ARMY
RESEARCH, DEVELOPMENT, TEST AND EVALUATION, ARMY
ANALYSIS OF REIMBURSABLE PROGRAM
(\$ In Thousands)

Section 5

	FY 1981 ACTUAL	FY 1982 ESTIMATE	FY 1983 ESTIMATE
<u>Customer</u>			
Department of the Army.	514,121	492,225	437,050
<u>Other Department of Defense Components</u>			
Department of the Navy.	41,050	17,744	13,844
Department of the Air Force	61,822	38,332	48,610
US Marine Corps	13,341	10,041	12,168
Other Defense Agencies.	21,011	23,497	22,068
Subtotal.	653,345	581,839	533,740
<u>Activities Outside Department of Defense</u>			
Department of Energy.	2,027	2,283	2,865
Department of Transportation.	874	915	1,120
National Aeronautics and Space Administration	461	1,462	2,232
National Security Agency.	676	787	827
Trust Funds	1,141	-	-
Other	12,041	15,182	9,799
Nonfederal Sources.	22,893	17,732	7,317
Subtotal.	40,113	38,361	24,160
TOTAL	693,458	620,200	557,900

UNCLASSIFIED

UNCLASSIFIED

Section 5 (Contd)

ANALYSIS OF REIMBURSABLE PROGRAM

DESCRIPTION OF REIMBURSABLE WORK

A large percentage of the Research, Development, Test and Evaluation reimbursable program is for intra-Army (both inter/intra-appropriation) work or services performed under automatic reimbursement procedures. Research, Development, Test and Evaluation efforts also support requests received from other Federal and Nonfederal agencies on a reimbursable basis. Major areas of support include:

a. Navy. Ultrafiltration reverse osmosis system; rotating biological contractor system; studies of heat stress in personnel wearing chemical warfare clothing; radar profiling of sea ice; optical properties of sea ice; fuel filter evaluation; craft test of fuel-water separator; support of ALQ 136 and APR 44; TOMAHAWK cruise missile; armor plate; armored protection system; 5" semi active laser program; hydrocode exploration; 75mm anti armor weapon system.

b. Air Force. Pavement analysis and evaluation; CSA evaluation; MX support; shielding; anti-icing coating; support of MINUTE MAN II and III firing; Space Detection and Tracking System; modification to ALTAIR radar; threat models for Inter-continental Ballistic Missile/Sea Launched Ballistic Missile geometry simulations; evaluation of Air Force clothing; effect of munitions on hardened structures; assessment of Polar biomedical research; HAWK support; ground launch cruise missile; global systems demonstration; radio terminal sets; very high speed integrated circuits; ground positioning system; aircrew body armor.

c. Marine Corps. MULE program support; 8" semi active laser program; Joint Service Small Arms Program support; cargo trailer; utility trailer; helicopter external cargo handling; cold weather clothing and equipment; man pack solar power unit development; support of the joint test element; TRI-TAC.

d. Other Defense Agencies.

(1) Defense Advanced Research Projects Agency. Anti tactical missile construction evaluation; basic skills program; Advanced Ballistic Reentry Systems tests; engineering support; gun propellant program; global positioning systems test; infrared flyover.

(2) Defense Mapping Agency. Photogrammetric and cartographic exploitation; geodetic and geophysical support; data base/data bank support; microform technology; remote sensing and interdisciplinary imagery analysis.

UNCLASSIFIED

UNCLASSIFIED

Section 5 (Contd)

ANALYSIS OF REIMBURSABLE PROGRAM

(3) Defense Nuclear Agency. Silo test program; material studies; hardened structures; MX related efforts; nuclear weapons effect program; vulnerability studies.

e. Department of Energy. Oil shale studies; repository sealing; mine shaft lining; blast resistant structures; energy analysis; ecological baseline investigation along Yukon.

f. Department of Transportation. Railcar pool fire test; ship test and ice deflector tests; expedite ships through ice.

g. National Aeronautics and Space Administration. Integrated tech rotor program; Joint Army Navy and Air Force base flow; energy analysis; numerical modeling of sea ice dynamics; orbital flight test-space shuttle.

h. National Security Agency. Electronic warfare equipment testing; engineering support.

i. Nonfederal Sources. Multiple Launched Rocket System for Germany, France and United Kingdom; seafood identification system; mechanical properties of multi-year ice; Alaskan driving cycle; compression tests; revegetation; waterflood monitoring

UNCLASSIFIED

UNCLASSIFIED

DEPARTMENT OF THE ARMY
RESEARCH, DEVELOPMENT, TEST AND EVALUATION, ARMY
FEDERAL CONTRACT RESEARCH CENTERS

Section 6

Federal Contract Research Centers (FCRCs) are those organizations primarily engaged in providing specialized technical and scientific effort necessary to supplement that available in the Army. The centers listed are those sponsored by the Department of Defense which provide technical and management services in the management of the Army's programs. These centers provide independent, specialized, technical and scientific capabilities to supplement that available within the Department of the Army.

FCRCs have been established to permit more organizational flexibility, and greater availability of technical and scientific personnel. These research centers possess unique skills and capabilities resulting from the development of highly specialized professional staff intimately acquainted with the many facets of the Army's mission. This capability results from long association and practical experience with the Army. The in-depth background provides the Army with a research capability that cannot be immediately obtained elsewhere. Long association with the Department of Defense enables these centers to render quick response technical advisory service as well as to perform detailed research and analysis. This long association has tailored these research centers to be compatible with Army interests, procedures and operational requirements.

While the Army no longer sponsors an FCRC it will be necessary to continue research and development effort at FCRCs sponsored by the Department of Defense and the other services. These research and development contracts provide timely and innovative products and techniques appropriate to current and long-range Army missions and plans.

The requested FY 1983 FCRC requirements reflect an increase of \$7.7 million when comparing FY 1983 to FY 1982.

UNCLASSIFIED

UNCLASSIFIED

Section 6 (Contd)

FEDERAL CONTRACT RESEARCH CENTERS

The following summary identifies the estimated work, excluding subcontract effort, to be placed with each Federal Contract Research Center (FCRC) from the Research, Development, Test and Evaluation, Army appropriation and from the other Army appropriations.

SUMMARY BY APPROPRIATION AND PROGRAM ELEMENT (\$ in Thousands)

FEDERAL CONTRACT RESEARCH CENTER/APPROPRIATION/PROGRAM ELEMENT	FY 1981 ACTUAL	FY 1982 ESTIMATE	FY 1983 ESTIMATE	FY 1984 ESTIMATE
<u>AEROSPACE CORPORATION</u>				
<u>Research, Development, Test and Evaluation, Army</u>				
6.21.05.A Materials	200	-	120	130
6.23.07.A Laser Weapons Technology	80	100	150	160
6.26.18.A Ballistics Technology	50	60	80	90
6.37.30.A Tactical Surveillance System	408	482	528	565
6.37.45.A Tactical Electronic Surveillance Systems	459	535	594	635
6.47.40.A Tactical Surveillance System	357	428	462	495
6.47.45.A Tactical Electronic Surveillance Systems	255	321	396	425
Total RDTE, Army	1,809	1,926	2,330	2,500
Total Aerospace Corporation	1,809	1,926	2,330	2,500

UNCLASSIFIED

UNCLASSIFIED

Section 6 (Contd)

FEDERAL CONTRACT RESEARCH CENTERS

SUMMARY BY APPROPRIATION AND PROGRAM ELEMENT
(\$ in Thousands)

FEDERAL CONTRACT RESEARCH CENTER/APPROPRIATION/PROGRAM ELEMENT

AEROSPACE CORPORATION (Continued)

Remarks: The expertise and facilities of Aerospace Corporation are required to support the Army in FY 1983-FY 1984 as follows:

1. Technical expertise to assist in successful application and demonstration of metal matrix composites in transmission cases and exploitation of aerospace steel for Army armor requirements.
2. Provide laser facilities for conducting damage and vulnerability experiments and required test program support as well as basic research, experimental performance and theoretical analyses of pulsed chemical lasers.
3. Continuing Aerospace support is required in the area of ballistics technology. In FY 1981, a description of the two dimensional unsteady muzzle exhaust flow over both a single and double baffle configuration was developed. In FY 1982, consideration will begin on the geometry of a field muzzle brake and computation of the idealized three-dimensional brake. In FY 1983, computation of the flow through the first baffle chamber of a field muzzle brake will be conducted. The computation of the flow through both the first and second chambers of a double baffle muzzle brake is planned for FY 1984.
4. General Systems Engineering/Technical Direction and Systems support is required in the development of a comprehensive system concept defining the functions, equipment, communications, personnel and interfaces necessary to integrate space system support into ground force operations. Additional requirements include technical support and systems studies in evaluation of Army unique space systems capabilities; support of simulation development and documentation; and exercise several simulation programs to evaluate the support of potential advanced space systems to the tactical commander.

UNCLASSIFIED

UNCLASSIFIED

Section 6 (Contd)

FEDERAL CONTRACT RESEARCH CENTERS

SUMMARY BY APPROPRIATION AND PROGRAM ELEMENT
(\$ In Thousands)

<u>FEDERAL CONTRACT RESEARCH CENTER/APPROPRIATION/PROGRAM ELEMENT</u>	<u>FY 1981 ACTUAL</u>	<u>FY 1982 ESTIMATE</u>	<u>FY 1983 ESTIMATE</u>	<u>FY 1984 ESTIMATE</u>
<u>LINCOLN LABORATORY, MASSACHUSETTS INSTITUTE OF TECHNOLOGY</u>				
<u>Research, Development, Test and Evaluation, Army</u>				
6.21.07.A Laser Weapons Technology	-	-	250	300
6.27.15.A Tactical Electronic Warfare Techniques	-	-	100	100
6.33.04.A Ballistic Missile Defense Advanced Technology	9,545	10,949	12,246	13,005
6.37.06.A IFF Development (NATO)	1,800 ^a	1,700 ^a	-	250
6.51.01.A Kwajalein Missile Range	3,785	4,560	5,437	5,775
6.58.04.A White Sands Missile Range	1,000	1,200	-	-
6.58.06.A DOD High Energy Laser Systems Test Facility (WSMR)	-	-	2,000	2,300
Total RDTE, Army	14,330	16,709	20,033	21,730
Total RDTE, Army Included in Air Force Ceiling	1,800	1,700	-	-
Total Lincoln Laboratory, Massachusetts Institute of Technology	16,130	18,409	20,033	21,730

^a Program funded by Army but supported with Air Force ceiling.

UNCLASSIFIED

UNCLASSIFIED

Section 6 (Contd)

FEDERAL CONTRACT RESEARCH CENTERS

SUMMARY BY APPROPRIATION AND PROGRAM ELEMENT
(\$ in Thousands)

FEDERAL CONTRACT RESEARCH CENTER/APPROPRIATION/PROGRAM ELEMENT

LINCOLN LABORATORY, MASSACHUSETTS INSTITUTE OF TECHNOLOGY (Continued)

Remarks:

1. Lincoln Laboratory provides a unique research and development capability not duplicated in industry. Lincoln Laboratory serves as *Scientific Director of the Kiernan Reentry Measurement Site* at Kwajalein Missile Range. They have been responsible for conceptualization, design and system operation on a continuous basis since 1960. The United States possesses no other comparable facility capable of collecting exoatmospheric data and recording missile reentry phenomena than the Kiernan Reentry Measurement Site radar complex.

2. Lincoln Laboratory effort includes *direction of all activities required to assure readiness and optimum coverage of a mission* by the Kiernan Reentry Measurement Site radars. Responsibilities of their systems engineers and analysts include upgrades to the radars to meet the changing and unique mission requirements generated by range user programs and to improve data quality and system reliability.

3. In support of the Ballistic Missile Defense Advanced Technology program, efforts will continue in the areas of discrimination techniques, signal processing, advance radar components, millimeter wave instrumentation radar and monolithic millimeter wave transceiver module, and optical aircraft measurement program sensor development and system integration.

4. Lincoln Laboratory also provides consulting services and technical expertise in the conceptual design of the instrumentation for the Department of Defense High Energy Laser Systems Test Facility at the *White Sands Missile Range*. Continued support is required for the education and analysis of high energy laser test requirements as well as experimental test program planning, test components and instrumentation, acquiring and reducing data in support of the laser damage and vulnerability program.

UNCLASSIFIED

UNCLASSIFIED

Section 6 (Cont'd)

FEDERAL CONTRACT RESEARCH CENTERS

SUMMARY BY APPROPRIATION AND PROGRAM ELEMENT (\$ in Thousands)

FEDERAL CONTRACT RESEARCH CENTER/APPROPRIATION/PROGRAM ELEMENT	FY 1981 ACTUAL	FY 1982 ESTIMATE	FY 1983 ESTIMATE	FY 1984 ESTIMATE
<u>MITRE CORPORATION</u>				
<u>Research, Development, Test and Evaluation, Army</u>				
6.22.02.A Aircraft Avionics Technology	300	400	400	480
6.27.01.A Communications Technology	966	890	1,320	1,480
6.27.04.A Military Environmental Criteria Development	-	-	-	120
6.33.08.A Ballistic Missile Defense Systems Technology	-	365	416	450
6.36.29.A Division Support Weapon System	-	150	290	350
6.37.07.A Communications Development	732	112	220	265
6.37.13.A Joint Tactical Information Distribution Systems	-	600	880	1,000
6.37.23.A Command and Control (C2) Tactical Automation	-	-	140	750
6.37.45.A Tactical Electronic Support Measures Systems	480	480	-	-
6.43.21.A Joint Tactical Fusion Program	-	-	1,050	1,180
6.47.01.A Communications Engineering Development	546	570	625	450
6.47.02.A Joint Tactical Information Distribution Systems	-	840	912	1,000
6.47.12.A Army Tactical Command, Control, and Communications Systems Engineering	836	1,123	2,740	3,080
6.47.45.A Tactical Electronic Support Measures Systems	300	470	-	-
6.47.79.A Joint Interoperability of Tactical Command and Control Systems (JINTACCS)	2,623	2,925	2,104	2,915
Total RDT&E, Army	6,783	8,925	11,097	13,520

UNCLASSIFIED

UNCLASSIFIED

Section 6 (Cont'd)

FEDERAL CONTRACT RESEARCH CENTERS

SUMMARY BY APPROPRIATION AND PROGRAM ELEMENT
(\$ in Thousands)

<u>FEDERAL CONTRACT RESEARCH CENTER/APPROPRIATION/PROGRAM ELEMENT</u>	<u>FY 1981</u> <u>ACTUAL</u>	<u>FY 1982</u> <u>ESTIMATE</u>	<u>FY 1983</u> <u>ESTIMATE</u>	<u>FY 1984</u> <u>ESTIMATE</u>
<u>MITRE CORPORATION (Continued)</u>				
<u>Operations and Maintenance, Army</u>				
202399 Central Army Group Command Control Information System	497	547	-	-
202399 USAREUR Command Control Information System Implementation	1,100	1,200	1,200	1,200
313298 World-Wide Military Command and Control System	-	-	760	-
315128 Software Penetration Evaluation Analysis	-	-	-	350
381302 Intelligence and Threat Analysis Center Technical Support	-	-	828	910
393111 Army Command and Control Master Plan	200	400	-	-
393111 Transition Communication Planning	-	-	361	875
393145 Command and Control Technical Support	675	857	1,000	1,200
395701 Army Base Information Transfer System/Walter Reed Medical Center Information Transfer System	120	-	-	1,055
951212 Work Plan Small Computer	-	-	135	-
951212 Combat Service Support Transition Plan	-	-	-	90
Total Operations and Maintenance, Army	3,192	3,004	4,784	5,680
Total MITRE Corporation	9,975	11,929	15,881	19,200

UNCLASSIFIED

UNCLASSIFIED

Section 6 (Contd)

FEDERAL CONTRACT RESEARCH CENTERS

SUMMARY BY APPROPRIATION AND PROGRAM ELEMENT
(\$ in Thousands)

FEDERAL CONTRACT RESEARCH CENTER/APPROPRIATION/PROGRAM ELEMENT

MITRE CORPORATION (Continued)

Remarks: The Army has a continuing need for the expertise and technical support of the C³ Division, MITRE Corporation.

1. The MITRE Corporation is a broad spectrum systems engineering and planning organization covering many important systems emphasizing command, control, and communications (C³).
2. The Army is entering an era which will be characterized by the need to exchange timely and accurate information among many diverse elements. New, automated battlefield systems encompassing the intelligence, field artillery, air defense, command and control, aviation and combat support mission areas will be fielded. Increasing emphasis is being given to closer communication and coordination between Army ground and airborne units.
3. MITRE efforts produce a detailed description of operational processes, time factors and information exchange. With this, capability gaps and system definitions can be exposed, and comparisons between current systems and proposed alternatives can be carried out. A synthesis of future C³ architecture can then be carried out using advanced technology to redress system deficiencies and to meet future requirements.
4. MITRE efforts will also be utilized in the investigation of hardware and software aspects of digital network management and control and in the development of a state-of-the-art family of militarized computers and peripherals to be utilized for all tactical computer based systems.
5. MITRE will provide systems research, analysis, engineering and technical management support; program formulation; planning; and coordination with related activities to identify and define future objective system designs for the integration of Army tactical subsystems and facilities.

UNCLASSIFIED

UNCLASSIFIED

Section 6 (Contd)

FEDERAL CONTRACT RESEARCH CENTERS
SUMMARY BY APPROPRIATION AND PROGRAM ELEMENT
(\$ in Thousands)

FEDERAL CONTRACT RESEARCH CENTER/APPROPRIATION/PROGRAM ELEMENT	FY 1981 ACTUAL	FY 1982 ESTIMATE	FY 1983 ESTIMATE	FY 1984 ESTIMATE
<u>TOTAL PROGRAM SUMMARY BY APPROPRIATION</u>				
Research, Development, Test and Evaluation, Army.	22,922	27,560	33,460	37,750
Operations and Maintenance, Army.	<u>3,192</u>	<u>3,004</u>	<u>4,784</u>	<u>5,680</u>
Total Federal Contract Research Center Requirement.	26,114	30,564	38,244	43,430

UNCLASSIFIED

UNCLASSIFIED

**DEPARTMENT OF THE ARMY
RESEARCH, DEVELOPMENT, TEST AND EVALUATION, ARMY
MAJOR IMPROVEMENTS TO AND CONSTRUCTION OF GOVERNMENT-OWNED
FACILITIES FUNDED BY ROTE, ARMY APPROPRIATION**

Section 7

PART 1. UTILIZATION OF SECTION 2353, TITLE 10 AUTHORITY

Specialized R&D facilities and/or equipment determined to be necessary for the performance of a contract for a Military Department for research and development may be constructed by or furnished to the contractor and funded from appropriations available for research, development, test and evaluation. The Congress enacted this legislation, now 10 USC 2353, in 1956. This policy is executed through DOD Directive 4275.5. Under this policy, the Secretaries of the Military Departments or their designees, and the Directors of Defense Agencies may approve facilities projects up to \$1,000,000; the Under Secretary of Defense Research and Engineering approves projects exceeding \$1,000,000. The Congress is notified in advance of starting any project involving construction, regardless of the dollar amount. The table below provides a summary listing of all such projects accomplished in FY 1981 and planned in FY 1982 and FY 1983.

Facility/Equipment	ROTE Project Number	Contractor	Location	Total Obligational Authority (Thousands of Dollars)		
				FY 1981	FY 1982	FY 1983

SECTION I

Projects Accomplished or Underway

Negative

SECTION II

Projects Planned or Projected

Negative

UNCLASSIFIED

UNCLASSIFIED

Section 7 (Contd)

MAJOR IMPROVEMENTS TO AND CONSTRUCTION OF GOVERNMENT-OWNED FACILITIES FUNDED BY RDTE, ARMY APPROPRIATION

PART 2. UTILIZATION OF RDTE APPROPRIATION FOR FACILITIES AT GOVERNMENT-OWNED/GOVERNMENT-OPERATED INSTALLATIONS

The RDTE appropriation may finance the development, design, purchase, and installation (including directly related foundations, shielding, environmental control, weather protection, structural adjustments, utilities and access) of equipment or instrumentation required for research, development, test and evaluation activities. The table below provides a summary listing of all such projects for the installation of equipment, where the cost of installation is \$100,000 or more, accomplished in FY 1981 and planned in FY 1982 and FY 1983.

Facility/Equipment	RDTE Project Number	Location	Total Obligational Authority (Thousands of Dollars)		
			FY 1981	FY 1982	FY 1983

SECTION I

Projects Accomplished or Underway

Installation of Air Conditioning for Computer Room	612707.A855	US Army Engineer Topographic Laboratories, Building 2592, Fort Belvoir, Virginia	442	-	-
---	-------------	--	-----	---	---

SECTION II

Projects Planned or Projected

Installation of X-Ray Machine	612770.A871	Walter Reed Army Institute of Research, Building 40, WRAIR, Washington, DC	-	100	-
-------------------------------	-------------	--	---	-----	---

UNCLASSIFIED

UNCLASSIFIED

Section 7 (Contd)

**MAJOR IMPROVEMENTS TO AND CONSTRUCTION OF GOVERNMENT-OWNED
FACILITIES FUNDED BY RDTE, ARMY APPROPRIATION**

PART 1. UTILIZATION OF RDTE APPROPRIATION FOR MINOR CONSTRUCTION

For in-house installations, construction projects in support of R&D for \$100,000 or less are funded from RDTE appropriations. Such expenditures are authorized by 10 USC 2674 and the applicable provisions of the current DOD Appropriations Act. Under this procedure, project approval at this level is authorized by the Major Command concerned, or delegated to R&D installation commanders as appropriate. The table below provides a summary total of such minor construction accomplished in FY 1981, and the estimated amounts planned for FY 1982 and FY 1983. All minor construction must result in a complete and usable facility. In no event is two or more minor construction projects or minor and major construction projects to be contrived to form a usable facility.

SUMMARY OF MINOR CONSTRUCTION FUNDED BY RDTE, ARMY

<u>FY 1981</u>	<u>FY 1982</u>	<u>FY 1983</u>
3,320	4,864	4,495

UNCLASSIFIED

UNCLASSIFIED

Section 7 (Contd)

**MAJOR IMPROVEMENTS TO AND CONSTRUCTION OF GOVERNMENT-OWNED
FACILITIES FUNDED BY RDT&E, ARMY APPROPRIATION**

**RDT&E INSTALLATION PROJECT FACT SHEET
(Supporting Projects Over \$400,000)**

- I. Facility/Equipment: Installation of Air Conditioning for Computer Room
- II. R&D Program Element: 6.27.07.A
- III. R&D Project Number: A855
- IV. Location: US Army Engineer Topographic Laboratories, Building 2592, Fort Belvoir, Virginia
- V. R&D Funds Programed: FY 1981 \$442,000
- VI. Other Funds: None
- VII. Relationship to R&D Program Element: The activity is involved in the research and development of highly sophisticated computer controlled equipment to satisfy the mapping, geodesy and military geographic requirement of the Army and Defense Mapping Agency under Army Projects 855, 52C, US Army Materiel Development and Readiness Command, Army Space Program Office, Defense Mapping Agency and miscellaneous reimbursable programs. The rooms containing this equipment are cooled by the building central air conditioning. Thus, even in the spring and fall the building central air conditioning is operating to cool the computer rooms. This project will allow the central air conditioning to be turned off for several months of the year at considerable energy and cost savings. The original estimate during FY 1981 for this requirement was for \$250,000, however, the current government estimate is for \$442,000.
- VIII. Rationale for Funding Effort in R&D: This facility and equipment is used solely for R&D missions.

UNCLASSIFIED

UNCLASSIFIED

DEPARTMENT OF THE ARMY
RESEARCH, DEVELOPMENT, TEST AND EVALUATION, ARMY
PROJECT DATA FOR CONSTRUCTION AT GOVERNMENT-OWNED
FACILITIES FUNDED BY RDT&E, ARMY APPROPRIATION

Section 8

NOT APPLICABLE

UNCLASSIFIED

UNCLASSIFIED

SECURITY CLASSIFICATION OF THIS PAGE (When Data Entered)

REPORT DOCUMENTATION PAGE		READ INSTRUCTIONS BEFORE COMPLETING FORM
1. REPORT NUMBER N/A	2. GOVT ACCESSION NO.	3. RECIPIENT'S CATALOG NUMBER
4. TITLE (and Subtitle) Department of the Army Justification of Estimates for Fiscal Year 1983 Submitted to Congress February 1982		5. TYPE OF REPORT & PERIOD COVERED Army RDTE Budget Justification FY 1983
		6. PERFORMING ORG. REPORT NUMBER
7. AUTHOR(s) Department of the Army		8. CONTRACT OR GRANT NUMBER(s)
9. PERFORMING ORGANIZATION NAME AND ADDRESS HQDA, Office of the Deputy Chief of Staff for Research, Development, & Acquisition (DAMA-PPR-B) Washington, DC 20310		10. PROGRAM ELEMENT, PROJECT, TASK AREA & WORK UNIT NUMBERS
11. CONTROLLING OFFICE NAME AND ADDRESS HQDA, Office of the Deputy Chief of Staff for Research, Development, & Acquisition (DAMA-PPR-B) Washington, DC 20310		12. REPORT DATE February 1982
		13. NUMBER OF PAGES 67
14. MONITORING AGENCY NAME & ADDRESS (if different from Controlling Office)		15. SECURITY CLASS. (of this report) UNCLASSIFIED
		15a. DECLASSIFICATION/DOWNGRADING SCHEDULE
16. DISTRIBUTION STATEMENT (of this Report) Approved for public release, distribution unlimited.		
17. DISTRIBUTION STATEMENT (of the abstract entered in Block 20, if different from Report)		
18. SUPPLEMENTARY NOTES		
19. KEY WORDS (Continue on reverse side if necessary and identify by block number) Army Research, Development, Test and Evaluation Budget Justification Book for justification of estimates submitted to Congress in February 1982 for Fiscal Year 1983.		
20. ABSTRACT (Continue on reverse side if necessary and identify by block number)		

DATE
LME