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Program) ARPA가 < 1 > 8 (TRP: Technology Reinvestment 1993 95

ARPA ARPA

< 1 > , 1993-1995

(단위: 백만 달러)

|   | 1993             | 1994         | 1995 *       |
|---|------------------|--------------|--------------|
| <b>Department of Defense Dual-Use Technology Reinvestment</b>     | <b>882</b>       | <b>1,441</b> | <b>1,429</b> |
| Technology Reinvestment Project (TRP)                             | 465 <sup>i</sup> |              |              |
| Dual-Technology Partnerships                                      | 82               | 150          |              |
| Commercial-Military Integration Partnerships                      | 42               | 100          |              |
| Regional Technology Alliances                                     | 91               | 100          |              |
| Advanced Manufacturing Technology Partnerships                    | 23               | 30           |              |
| Manufacturing Engineering Education Program                       | 48*              | 24           |              |
| Manufacturing/Technology Extension <sup>i</sup>                   | 179              |              |              |
| SBIR  | 71               |              |              |
| MARITECH  |                  | 30           | 40           |
| Reprogramming/Undistributed Funds                                 |                  | 120          | 535          |
| Related TRP programs  | 91               | 270          | 157          |
| Agile Manufacturing/Enterprise Integration <sup>i</sup>           | 29               | 35           |              |
| Advanced Materials Partnerships <sup>i</sup>                      | 29               | 30           |              |
| US Japan Management Training                                      | 9                | 5            |              |
| Other/DPA   | 24               | 200          | 107          |
| Navy Reinvestment Initiative                                      |                  |              | 50           |
| SBIR refocused to dual-use  | 85               | 161          | 161          |
| Electronics and Materials Initiatives                             | 241              | 268          | 148          |
| High definition systems   | 92               | 85           | 68           |
| Optoelectronics   | 23               | 32           | 26           |
| Metal matrix and ceramics   | 9                | 31           | 3            |
| Diamond substrates/multi-chip modules/high temp superconductivity | 23               | 27           | 1            |
| Military Medical/Trauma Car Technology                            |                  |              | 15           |
| Battery technology  |                  | 6            |              |
| Multi chip modules  | 22               | 29           | 25           |
| Advanced lithography  | 71               | 58           | 10           |
| Additional Dual-Use Initiatives <sup>iii</sup>                    |                  | 188          | 338          |
| Composite materials manufacturing/Microelec. Manuf./Microwave     |                  | 4            | 22           |
| High Performance Computing  |                  |              | 43           |
| Infrared Focal Plane Array  |                  | 7            | 11           |
| Manufacturing Technology Initiatives                              |                  | 3            | 12           |
| Electronics Modules   |                  | 27           | 64           |
| Software Engineering  |                  |              | 3            |
| Materials Processing  |                  | 25           | 30           |
| Electronics Processing  |                  | 11           | 11           |
| Advanced Simulation   |                  | 16           | 36           |
| High Temperature Superconductivity                                |                  | 3            |              |

|  |    |    |
|--|----|----|
| Advanced Simulation                    | 18 | 50 |
| High Temperature Superconductivity     | 3  |    |
| Intelligence System Software           | 29 | 55 |
| Environmental Electronic Manufacturing | 20 | 11 |
| CALS                                   | 42 | 40 |

- \* Administration's FY 1995 Budget Request
  - ! The FY 1993 TRP solicitation included \$7 million in SBIR funds to equal \$472 million. FY 1993 TRP funds exclude on-going programs not subject to TRP criteria.
  - ! FY 1993 funds support program over two year period. Department of Commerce has additional funds for Extension Programs.
  - \* Includes \$20.1 million in FY 1992 funds redirected to the TRP.
  - ! These programs may be included in the TRP in FY 1995.
  - ! Funding represents program levels above the FY 1993 levels.
- NOTE: Totals may not add due to rounding.

자 료: 예산관리국(OMB) 미발표 데이터

|       |           |           |           |             |
|-------|-----------|-----------|-----------|-------------|
|       | ARPA      | ARPA      | SEMATECH  |             |
| 가     |           |           |           |             |
| TRP   | TRP       |           | TRP       | 志向          |
| 가     |           |           | ARPA      |             |
| 1992  |           |           |           |             |
| 1992  | 6 , ARPA( | DARPA)    | 1992      | 7가<br>6,000 |
| 가     |           |           |           |             |
| 1992  | 4 20 ,    |           | ( ) DARPA | 1992        |
| 7가    |           | 3가        |           | 1992        |
|       |           | 6,000     |           |             |
| 1992  |           | 가         |           |             |
|       | (MCC)     |           |           |             |
|       | 超密        |           | 全光通信      |             |
| 1993  |           |           |           |             |
| 1993  |           |           | 가         | 1992        |
|       | , 1993    |           | 가         |             |
|       |           | Agile     |           | MARITECH    |
| < 1 > | 가         |           | 가         |             |
|       | (TRP)     |           |           |             |
| 6 ( ) | NIST,     | 가<br>NASA | NSF (TRP) | 1993        |
|       |           |           | ARPA가     |             |

TRP . . . 6 . . . 4 7,100 (1993 ) , . . . 가

TRP . . . 4가 . . . (DTCC) . . . 가가 . . . (SBIR) . . . 가 . . .

1993 . . . TRP . . . , TRP . . . 가 . . . 가

TRP . . . , TRP . . . 가 . . .

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3. . . 가 . . . 가 . . . 가

(NIST) . . . (NIH) . . .

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1993 690 , 230

2가 ( )

(1) :

Lawrence Livermore

Los Alamos

&lt; 2&gt; 1993

(단위: 100만 달러)

| 기 관         | 총 R&D  | 연방연구소  |
|-------------|--------|--------|
| 총무부         | 1,337  | 899    |
| 상무부         | 622    | 477    |
| 국립표준연구원     | 231    | 159    |
| 연방대기해양국     | 379    | 307    |
| 국방부         | 36,155 | 9,597  |
| 공군          | 12,652 | 1,416  |
| 육군          | 5,737  | 2,263  |
| 해군          | 8,754  | 3,248  |
| 국방부 산하 기관   | 8,397  | 2,337  |
| 에너지부        | 6,731  | 4,745  |
| 보건 및 인적서비스부 | 11,143 | 2,443  |
| 내무부         | 541    | 482    |
| 미항공우주국      | 8,629  | 3,397  |
| 총 계         | 69,754 | 23,309 |

Sandia

(2) :

Fermi

Berkely

Argonne

Brookhaven

Oak Ridge

Idaho

:

가 9 ( ) 8 ,  
. < 3 > 1988 '93 . 1993 ( 3 )  
34 . ,

5가 가 CRADAs 가 , 1989 가 (NCTTA)  
가 , 가 CRADAs  
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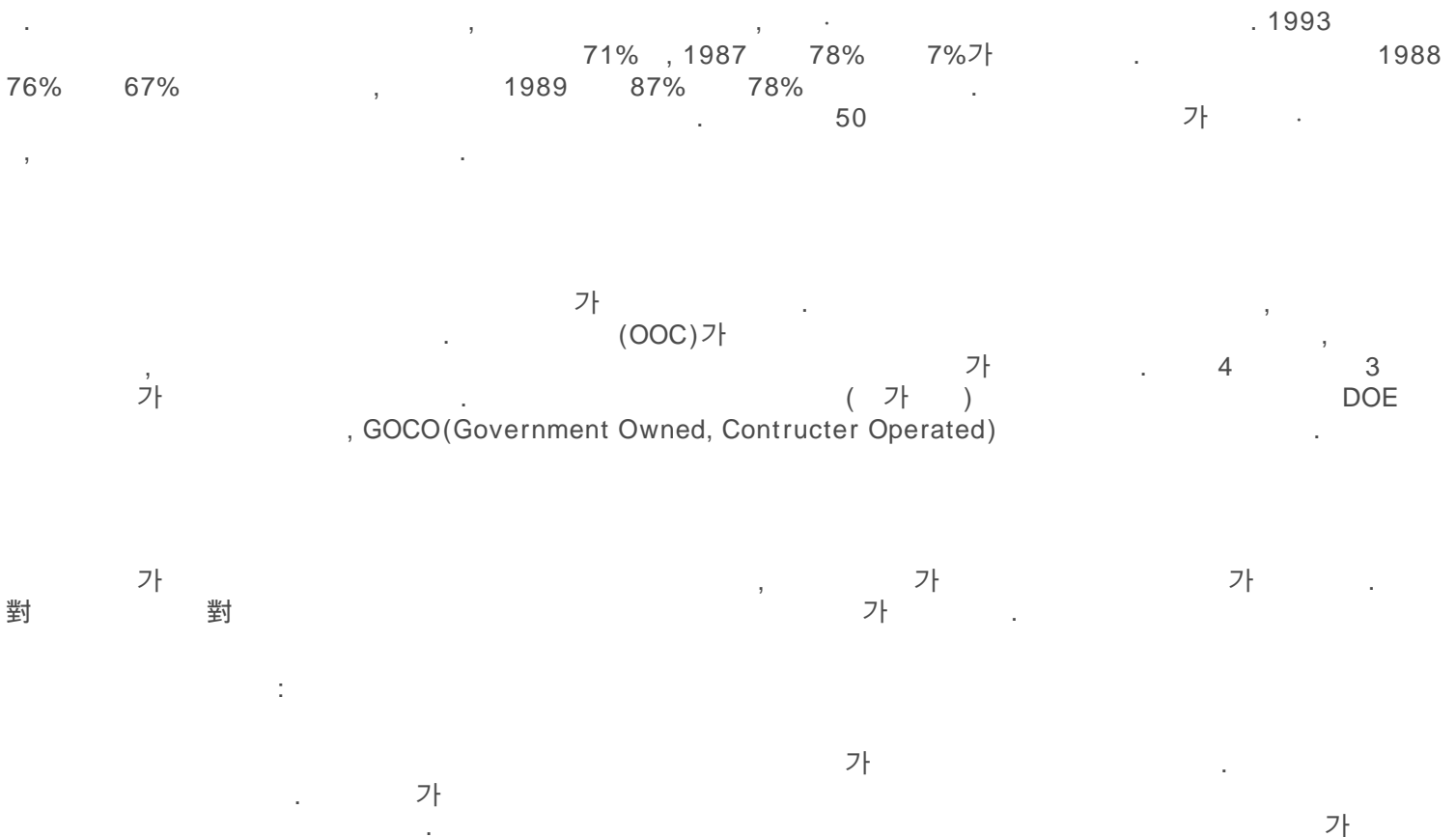
< 3 > 1988 1993



(단위: 100만 달러)

| 연도   | 로렌스<br>리버모어 | 로스<br>알라모스 | 산디아     | 합계      |
|------|-------------|------------|---------|---------|
| 1988 | 895.6       | 884.4      | 1,068.1 | 2,848.1 |
| 1989 | 953.0       | 902.3      | 1,081.6 | 2,936.9 |
| 1990 | 983.5       | 926.0      | 1,110.6 | 3,010.1 |
| 1991 | 1,052.5     | 947.5      | 1,134.7 | 3,134.7 |
| 1992 | 1,022.6     | 1,010.9    | 1,276.6 | 3,310.1 |
| 1993 | 963.0       | 1,104.8    | 1,350.0 | 3,417.8 |

자료: 미국 에너지부 (DOE)/의회기술평가국 (OTA)



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 가 (OTRAs) OTRAs  
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(ATP)  
 (ATP) (NIST) 1988  
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1986 ,  
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 가 CRADAs 가 CRADAs 가

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(단위: 100만 달러)

|   | 1994 | 1995 * | 1996 ** | 1997 ** | 1994-97 |
|---|------|--------|---------|---------|---------|
| 새로운 연방 하이테크기술 투자 <sup>a</sup>                                   | 907  | 1,734  | 2,054   | 2,444   | 7,139   |
| <b>Direct Conversion Opportunities<sup>b</sup></b>              |      |        |         |         |         |
| 에너지부<br>Cooperative R&D Government/industry partnerships        | 112  | 124    | 149     | 174     | 559     |
| 미항공우주국<br>Aeronautics Initiative                                | 160  | 218    | 275     | 333     | 986     |
| New Technology Investment                                       | 42   | 67     | 86      | 37      | 232     |
| 교통부<br>Intelligent Vehicle Highway System                       | 60   | 135    | 140     | 150     | 485     |
| 범부처 합동프로그램<br>High-performance Computing <sup>c</sup>           | 130  | 268    | 268     | 268     | 934     |
| Subtotal: Direct Conversion Opportunities                       | 504  | 812    | 918     | 962     | 3,196   |
| <b>Some Other Conversion Opportunities<sup>d</sup></b>          |      |        |         |         |         |
| 상무부<br>Information Highways                                     | 26   | 100    | 150     | 150     | 426     |
| National Institute of Science and Technology (NIST)             | 139  | 426    | 550     | 776     | 1,891   |
| 에너지부<br>Renewable Energy and Conservation R&D                   | 183  | 435    | 526     | 620     | 1,764   |
| 환경보호청<br>Environmental Technology                               | 36   | 80     | 120     | 170     | 406     |
| 범부처 합동프로그램<br>Government Automation and Modernization (IRS/SSA) | 422  | 802    | 925     | 1,248   | 3,397   |
| Subtotal: Some Conversion Opportunity<br>(50% of total)         | 403  | 922    | 1,136   | 1,482   | 3,943   |
| 교통부<br>National Shipbuilding Initiative <sup>e</sup>            | 50   | 50     |         |         | 100     |

\* Administration's FY 1995 Budget Request; \*\* Administration's Budget Projections

<sup>a</sup> Only funding above the FY 1993 level is shown.

<sup>b</sup> These programs offer some technology opportunities to defense firms and workers.

<sup>c</sup> Funding for FY 1996 and FY 1997 reflect the FY 1995 level since details beyond FY 1995 are not available.

<sup>d</sup> These programs offer some technology opportunities to defense firms and workers. Only 50 percent of the funds are included.

<sup>e</sup> FY 1994 funding for this program was provided to the Department of Defense.

Note: Totals may not add due to rounding.

Source: Office of Management and Budget, unpublished data.

자료: 예산관리국(OMB) 미발표 데이터, 1994년

(NIST), (NIIT), (NTIA), (NTIS),  
(IITF) (HPCC)

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JETRO

Technology Bulletin 350

"米國の國防轉換技術政策の動向"