

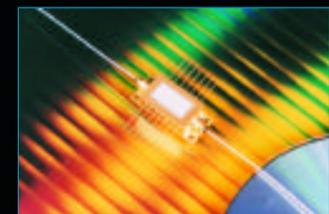
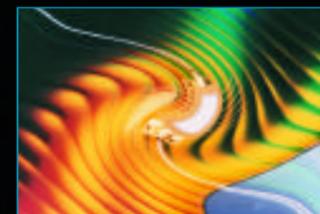
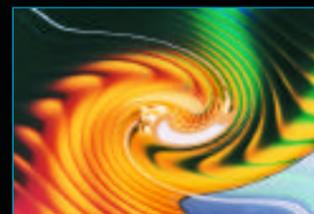
1997

TECHNOLOGY APPLICATIONS REPORT

BALLISTIC MISSILE DEFENSE ORGANIZATION



SPINOFF TECHNOLOGIES



OFFICE OF TECHNOLOGY APPLICATIONS
BALLISTIC MISSILE DEFENSE ORGANIZATION
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Since 1984, the Ballistic Missile Defense Organization (BMDO) has been committed to developing innovative technologies that strengthen our Nation's defense. With the same spirit of commitment, BMDO is dedicated to technology transfer—moving state-of-the-art military technology from the government into the commercial sector. Key to this effort is the BMDO Technology Applications program, whose technology transfer specialists provide a variety of outreach and engineering activities to support BMDO technology transfer.

For example, while performing technology transfer activities, our specialists have interviewed more than 300 BMDO technology developers about their commercialization efforts. The resulting data show BMDO technologies spawning new start-up companies and new products at a progressive rate. Chart 1 illustrates a 61 percent increase in the number of start-ups between 1994 and 1996. Chart 2 depicts a similar trend for commercial products, with an overall increase of 38 percent over the same period.

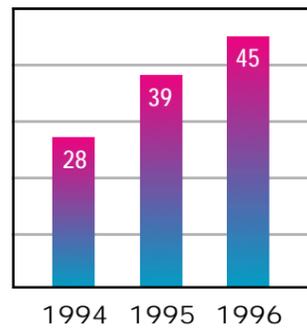
Data on new patents, public companies, and business relationships relating to BMDO technologies can be found on the inside back cover of this report. The Technology Applications program will continue its interviewing process to develop more data, which will be featured in future publications about BMDO technology transfer.

Readers desiring more information on innovative BMDO technologies or the Technology Applications program can write, call, fax, or e-mail us at:

The BMDO Technology Applications Office
 c/o National Technology Transfer Center,
 Washington Operations
 2121 Eisenhower Avenue, Suite 400
 Alexandria, Virginia 22314

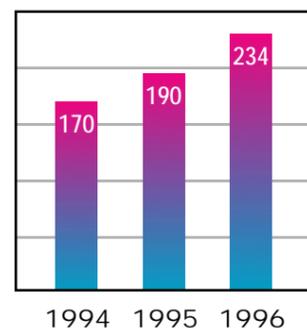
Telephone (703) 518-8800 ext. 500
 Facsimile (703) 518-8986
 E-mail pat@nttc.edu

START-UP COMPANIES



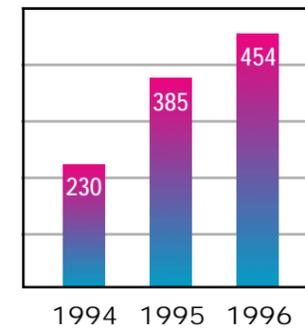
1

NEW COMMERCIAL PRODUCTS



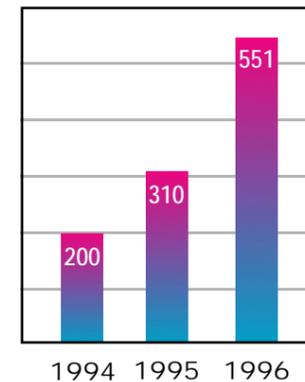
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BUSINESS RELATIONSHIPS FORMED



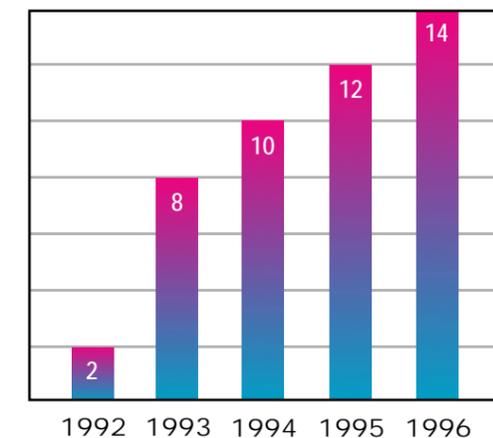
3

PATENTS



4

COMPANIES THAT HAVE GONE PUBLIC



5

The Technology Applications program supports BMDO's technology transfer efforts. As part of this support, technology transfer specialists have interviewed hundreds of BMDO technology developers about their commercialization efforts. The data they have collected show new business relationships increasingly being formed around BMDO technologies. Chart 3 illustrates a 97 percent increase in business relationships formed between 1994 and 1996. Examples of such relationships include licensing agreements, joint R&D, and marketing assistance.

Companies that develop BMDO technologies are realizing more and more that one of their most important assets is their intellectual property. Chart 4 shows that the number of new patents awarded for BMDO technologies has risen 176 percent within the past few years.

Chart 5 shows that 14 companies working on BMDO research and development projects have gone public since 1992. The total value of the companies' initial public offerings is estimated at \$277 million.

Readers who arrive at this page first should refer to the report's inside front cover, which contains data showing BMDO technologies spawning new start-up companies and products. The Technology Applications program continues to interview BMDO technology developers to collect new data, which will be featured in future publications on BMDO technology transfer.

Front Cover Photography

Main photo: Tinsley Laboratories, Inc., p. 77
 3-part inset: E-TEK Dynamics, Inc., p. 21