Intellect Partners
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To: Mr. Norman J. Latker **Date:** August 9, 1994

At: Browdy & Niemark **Fax:** 202 737-3528

From: Niels Reimers **Page:** 1 of 1

RECEIVED
AUG 9 1994
BROWDY & NEIMARK
WASHINGTON, D.C.

Dear Norm,

I read with pleasure of your well deserved Vannevar Bush Technology Transfer Award. Has Joe Califano sent you a bouquet yet?

Seriously, its great that you have been recognized for your many contributions to technology transfer. I hope all has been going well for you in the outside (of government) world although I would think you are spending at least some time indulging your anglophilic interest.

Just so you know what I've been doing in the outside (of academia) world, an Intellect Partners brochure will be mailed to you, along with a copy of this fax.

If you are out this way, please stop by.

Best regards,

Nils

Niels 8/10
Always good to hear from you.
No apology from Califano yet.
Waiting to see your brochure
and comment thereon.
Kind regards
Norm

FACSIMILE COVER SHEET
OFFICE OF TECHNOLOGY LICENSING
STANFORD UNIVERSITY

Sunday, October 9, 1994

TO:
Norman J. Latker

Stanford Docket Number

FROM:
Jon Sandelin
Facsimile: 415-725-7295 Phone: 415-723-0651

Originals to follow?
By Regular Mail ☐
By Federal Express ☐

REMARKS:

Hi Norm:

Attached is the Contibution Information for the nomination of Niels Reimers for the National Medal of Technology. Let me know if you see areas for improvement.

Thanks for you help. Please provide the letter by October 21 if you can, as time is now getting short.

RECEIVED
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BROWDY & NEIMARK
WASHINGTON, D.C.

TOTAL NUMBER OF PAGES: 1 (including cover sheet)
If you experience problems please call 415-723-0651 immediately.

Nomination of Niels J. Reimers
National Medal of Technology
Contribution Information

As a society moves from an industrial to an information economy, close linkages between a country's universities and industries have become increasingly critical to national competitiveness, job creation and economic well being. That the U.S. is a world leader in university - industry linkages is due, in significant part, to the foresight, pioneering efforts and management skills of Niels Reimers. Niels is often referred to as the "father of technology licensing" by the university community.

The technology licensing program at Stanford University, founded in 1969 and directed until 1991 by Niels Reimers, has established a standard that has become a model for not only universities but other not-for-profit organizations throughout the United States and beyond. An article entitled "Different Models for a University Licensing Office" and published in the January 1992 Newsletter of Association of University Technology Managers (AUTM) summarized below helps explain why.

From 1969 to 1991 Niels and his team increased annual royalties of the Stanford Office of Technology Licensing (OTL) program from $55,000 to $ 26 million. Since Niels resigned as director in 1991 the program has earned an additional $100 million.

#1 As an "industry", for much of which Niels deserves credit, 1992 university licensing produced $7.4 billion in sales, about $1.5 billion in related taxes, about $200 million in royalties, *with a current growth rate of 25-30% per year.*. These results were reported in the September 1993 AUTM Newsletter. In an era of diminishing government funding for basic research these results are becoming an increasingly important source of funding for US universities which in turn play an important role in maintaining and advancing our nations' education and living standards in an increasingly competitive global trading environment.

The AUTM article referred to above reflected a conversation attempting to explain to a new senior officer at Stanford why the technology licensing program of Stanford was so successful relative to other peer institutions.

It noted that the most important reason for the Office of Technology Licensing (OTL) success was the marketing model that Niels had created as a style of operation. When Niels started the office in 1969, there were only a few such university licensing programs in existence. The origin of such offices seemed to be either in the university legal office (the Legal Model) or in an administrative unit such as the sponsored projects office (the Administrative Model). The limitations inherent in the Legal Model and the Administrative Models were then explained in some detail. Basically, it is that the objectives and operating procedures for these groups do not relate well to what is necessary for a successful licensing operation.

The article continued:

> "Niels, in proposing a licensing office at Stanford, decided on a somewhat different approach (one I subsequently labeled as the marketing model). Some of the elements were unique at the time. The OTL would only do licensing, nothing else. Inventions would be owned by inventors, but if they chose to work with the OTL, they would be stakeholders in the technology transfer process (getting one-third of net royalties). The OTL would strive to be self-funded, taking 15% of gross income to cover expenses. Each invention would become a mini profit-center with a single licensing person responsible for all decisions from beginning to end. Outside patent attorneys would be used to file for patents. Patent costs would not be 'expensed' in the year incurred, but would be treated as an asset and only expensed if written off some years later. The university would provide a line of credit of $150,000 to cover cash flow fluctuations and possible inventory (mainly patent cost) write-offs. *Looking back, it was like a new business start-up within the university. At the time, it was a radical idea, and I learned from someone who was on the review panel that the proposal was approved by the barest of margins.*
>
> A new business, if it is to survive, must develop a line of products or services that someone wants to buy. The business must design effective packaging and must develop marketing strategies that alert potential buyers of the existence of the product. The sales force must then, through person contact, convince the potential buyer of the merits of the product. For university licensing, the inventor is the producer of the product, and also is the salesperson. The licensing person is responsible for packaging the product and for strategic marketing. Thus, it is helpful if the people hired to staff the licensing function have technical marketing backgrounds. And there also must be policies and incentives for the inventor to serve as the producer and salesperson, something not on the typical faculty job description. These issues would logically be the focus of a marketing model licensing office, and so they were during Niels' term as OTL Director."

Niels has contributed much more than develop an operating model that has adopted by the majority of the university licensing community, and is, in large measure, the reason for the explosive growth in licensing activity. His reputation as "father" of technology licensing is corroborated by invitations from MIT and the University of California at Berkeley to establish licensing programs modeled on the Stanford program. In 1985-86 and in 1990-91 respectively, Niels was set up and staffed programs at those universities while on loan from Stanford.

Niels has consummated hundreds of technology transactions over his career, including technologies that provided the foundation for companies as successful and diverse as Silicon Graphics and Genentech. Indeed, the fundamental gene splicing technology which forms the basis of the biotechnology industry was

patented for Stanford and UCSF researchers by Niels Reimers. Niels then formulated and implemented the technology transfer strategy for the DNA cloning technology fundamental to the biotechnology industry, 300 companies of which industry now license it from Stanford

Governmental policies were significant obstacles to the ability of university and government laboratories to work with industry through the 1970s until a watershed legislation, the Bayh-Dole Act of 1980 (PL 96-517), initiated a new era in government-university-industry relationships. Niels was a key actor in the shaping and passage of this legislation, and was present in the Senate gallery when the bill was approved 98-2.

He also contributes his insight to national technology policy issues and legislative initiatives. This includes participation in the National Academy of Science and other study panels and testifying at congressional hearings. Niels also is a Reviewer for the National Technology Transfer Center, Technology Applications Reviews.

Niels served with distinction as President of the Licensing Executives Society (USA and Canada) in 1977-78. This is the preeminent professional society (over 3,500 members in the US and Canada) in the field of technology transfer. He was the first, and so far the only, President from a university. Niels continues to be active in LES.

Another measure of his regard in the U.S. technology management community is his presence on the editorial boards of Technology Access Report and Technology Management. He also is the author of several publications in the fields of technology transfer, technology and technology management, examples of which are included with this nomination.

In 1992 Niels co-founded Intellect Partners, a unique venture capital funded partnership that engages in technology based transactions and strategic alliances worldwide, with particular emphasis on technology transfers to the U.S.

In considering Niels' nomination, it is important to recognize that not only has he established a national model for university - industry interactions, published, testified, advised and the like but has "done" hundreds of technology transfer transactions.

National competitiveness and job creations in today's information economy is increasingly dependent on rapid adaptation by U.S. industry of new technologies into services, products and processes. Such innovations are critically dependent on collaborations between industry and universities. Niels's contributions have made prominent the critical role of university-industry collaborations for the future of the Nation and provided a successful working model that has propagated widely and positively impacted the economic vitality of U.S. industry and of job creation. Niels has been a pioneer and established national models for technology management and transfer and is richly deserving of award of the National Medal of Technology.

University Science, Engineering
and Technology, Inc.
8000 Westpark Drive, McLean, VA 22102
Tel: 703/821-2030 Fax: 703/821-2049

M E M O R A N D U M

TO: Kevin Maxwell

FROM: Norman Latker

DATE: February 13, 1989

SUBJECT: Attached article

Attached is an article of interest. The identified portions relate to Dun and Bradstreet's involvement in:

- Manipulating existing information from different elements of the company to create new products
- The selling of Official Airlines Travel Guide to MCC

Dun & Bradstreet's Bid to Stay Ahead

The information giant is hitting its stride, making its data easier to get.

By CLAUDIA H. DEUTSCH

GEORGE J. FEENEY, the Dun & Bradstreet Corporation's senior vice president for advanced development, leaned across the table in his utilitarian Manhattan office and talked about, of all things, oil.

"In the oil business you start off exploring for oil, you move on to producing and refining it, and only then do you worry about marketing and distributing it," he mused. "Well, think of the information business like the oil business. In the 1970's and early 1980's, we gathered data, processed it and refined it. Now the critical technology is making it available to customers."

That thought is the driving force behind Dun & Bradstreet these days. The company has long been a premier gatherer of information, with a stable that includes such illustrious names as A. C. Nielsen, Donnelley, Moody's Investor Service and Dun & Bradstreet Credit. For the last three years or so, its top managers have been brainstorming with customers and with each other, trying to make sense out of the new rules in the information game.

The conclusion they have reached — and one that many business experts echo — is that with computers, facsimile machines and other purveyors of data growing ever more ubiquitous, businesses are suffering more from information overload than from information scarcity. Thus, the successful information companies of the 1990's may not be those that gather new data, but those that get existing facts to customers in the most useful form.

"In the past, we just provided research results," said John C. Holt, executive vice president in charge of marketing services. "Now we must provide solutions to problems."

Achieving that will be no easy task. In fact, D. & B. has been working hard — and so far, successfully — at two seemingly opposed goals. It has been simplifying its huge store of credit and marketing data so that even a computer illiterate can get what he or she wants without wading through reams of extraneous facts. And it has been reprogramming that data base so customers eventually can ask the computers to correlate information that will help them make credit-granting or marketing decisions.

"Our customers have gotten better at articulating their needs, and we're

Continued on Page 6

Dun & Bradstreet Makes a Bid to Stay Ahead

Continued from Page 1

changing to respond to those needs," said Charles W. Moritz, Dun & Bradstreet's chairman and chief executive.

Because the company's tentacles reach into such a huge number of unrelated information areas, its struggles to make that transition mirror what is happening throughout the information industry. Its credit business monitors the fiscal health and habits of nine million domestic and seven million foreign companies. Its A.C. Nielsen and Donnelley divisions have huge stores of data on television ratings and on product sales. Through Moody's and a few smaller subsidiaries, it has built formidable stores of data on corporate and municipal securities.

Over the years, sundry competitors have cropped up in all of those areas, only to be cowed by D. & B.'s sheer wealth and staying power. But now, the advent of electronic data bases and delivery systems has leveled the playing field a bit. The future belongs not necessarily to the richest or oldest companies, but to those best able to manipulate electrons, experts say.

MANY companies — including such diverse concerns as TRW Inc., McGraw-Hill Inc. and the Mead Corporation — want to join that category. TRW has successfully carved out fresh business-related products from its vast personal credit data base and is tinkering with its computer systems to find new ways to package them. Dow Jones & Company and Mead both run successful electronic news services. McGraw-Hill, whose Standard & Poor's service competes with Moody's, has been eager to create a market by electronically delivering information from its book and magazine divisions. While that effort has not so far succeeded, no analyst is counting it out.

"D. & B. is good enough to lick any competition that springs up in the next few years," said J. Kendrick Noble Jr., an analyst at Paine Webber Inc. who recommends D. & B. stock. "But the possibility always exists that some innovation from some source will make significant inroads in one of its markets."

Dun & Bradstreet, which has so far held on to its shares of market in all of its areas, is not about to yield ground easily. The 148-year-old company is fighting trim — last year its income from operations totaled $499 million, up 13.6 percent from 1987, on revenues that jumped 12.6 percent, to $4.26 billion. It also ended the year with more than $1 billion in cash. Increasingly, it is applying its vast resources toward new technology.

Currently, the company's huge credit data base generates entire credit reports. But Dun & Bradstreet is reprogramming its system to yield specific bits of information culled from numerous credit reports — say, how often a group of companies paid its bills on time, or how relatively fast several customers for the same product paid their bills.

The immediate goal: Let customers get what they need without wading through lengthy reports. The ultimate goal: Let them dip into the data on their own, without using D. & B. as the middleman. "We want our services to become part of the customer's work flow," Mr. Feeney said.

If that happens, the benefit to the company will go beyond satisfied customers. For if customers start retrieving information themselves, Dun & Bradstreet could slash its payroll, and thus its costs.

Several of the company's new products seem to represent progress toward that goal. Included among them are:

- DunsNet, a computerized service that delivers requested credit reports and some other data electronically so that customers need not deal with reams of paper. Nearly 90 percent of D. & B.'s credit data now goes to customers via DunsNet, and D. & B. is currently working on a system for computer-generated facsimile transmissions.
- Worldview, which lets securities analysts use their personal computers and a Lotus 1-2-3 spreadsheet to pull stock movement and financial information on companies and markets from a data base. The data base resides in the analyst's computer, and is updated automatically every night via an electronic link to Dun & Bradstreet's Datastream subsidiary in London.
- DunsVoice, which lets customers get credit information via touch-tone phone. D. & B. is now customizing the product so that the computer can check a business's credit history against a company's rules for granting credit, and recommend whether credit should be approved.

Dun & Bradstreet's marketing services group, which did not really pick up steam until the 1984 purchase of A.C. Nielsen, is a few years behind in D. & B.'s electronic revolution. It is still seeking new types of data to collect, and new ways to package them.

D. & B.'s Donnelley marketing group, for example, is using Nielsen Marketing Research's product-tracking services to compare the efficacy of mailed cents-off coupons and newspaper inserts. And it is fine-tuning its demographic data so that businesses that use its direct-mail services can take better aim at consumers. Until recently, all households in a given territory would receive the same package of cents-off coupons. Now, a single woman living alone receives a different mixture of promotions from a married couple living next door.

THE new services have given D. & B. a leg up in most of its markets. But that edge is vulnerable to technological breakthroughs by competitors.

TRW, for one, may not be so easy to beat in the years to come. For 13 years the company has been delivering its credit information via computer. Now, after a decade of confining itself to the health care, telecommunications and retailing industries, it is dipping its toe into banking, insurance and other markets that Dun & Bradstreet dominates. And last year it introduced a product called the Small Business Advisory Report that offers credit customers something that D. & B., which has never collected personal credit data, cannot provide: It gives customers who know the names and addresses or social security numbers of the owners of small businesses access to their personal credit reports.

TRW is developing computer-modeling capabilities in the marketing and credit areas that could eventually give Dun & Bradstreet a run for its money. But today, even Edward R. Freeman, vice president of TRW's Information Systems Group, concedes that "a business credit report, no matter who provides it, is known as a D. & B."

Maybe so, but getting customers to call for a "D. & B." is not necessarily easy. "Three-quarters of the credit decisions our customers make are based on information they generate internally," said James E. Rutter, executive vice president in charge of Dun & Bradstreet's business information group. "We had to find ways to deliver a better product for less than it costs a customer to put a clerk on the telephone."

Of course, that assumes that keeping costs down is a customer priority. Most of the time, that assumption is safe; sometimes, it is not. Dun & Bradstreet tried to persuade corporations to subscribe to an electronic version of its Official Airlines Travel Guide, that huge, unwieldy compendium of flight schedules. With the new system, would-be flyers could punch in their priorities — say, departure time or preferred airport — and the computer would come up with the cheapest flight available that met the criteria.

The product barely got off the ground. The problem, it turned out, was that many executives preferred choosing their flights on the basis of frequent flyer programs, rather than on saving their corporations money. In December, D. & B. sold the Guide for $750 million to Propwix Ltd., an affiliate of the Maxwell Communications Corporation.

The sale, which is expected to yield $450 million after taxes, probably pushed Dun & Bradstreet to make a lot of changes now that it might otherwise have phased in over the next few years. In part to get tax writeoffs to offset the gain, D & B. closed several computer centers and consolidated data processing operations. It has cut out a few regional managers. It has discontinued many paper products — for example, books that describe the demographics of neighborhoods surrounding certain stores. And it has stepped up its timetable for phasing out manual collection of data.

In one sense, the changes have been evolutionary rather than radical. Mr. Moritz's vision of the company is not much different from that of his predecessor, Harrington "Duke" Drake. Both he and Mr. Drake, whom he succeeded in January 1985, started out in the Donnelley division. Mr. Moritz, after 16 years of rising steadily through Donnelley's ranks, moved over to the parent company as an executive vice president in 1976. By the time he became president in 1981, he was well steeped in Mr. Drake's philosophies. The two men even use the same buzzwords — Mr. Drake always said that D. & B. was in a continuous process of orderly change, and Mr. Moritz salts his conversation with that term as well.

BUT even in a smooth evolutionary process, there are watersheds. Dun & Bradstreet's came in 1984.

Until then, credit and credit-derived information was D. & B.'s raison d'être, with marketing services accounting for a mere 16 percent of revenues. But in 1984, it bought Nielsen. Nielsen was best known for measuring television audiences, but for D. & B., its attraction fell in other areas. Nielsen was already monitoring retail sales of grocery and drug items, and was doing a smattering of market research. Some of its products overlapped with D. & B.'s — both companies had coupon-redemption services, for example — but most complemented them.

The $1.3 billion acquisition was the largest Dun & Bradstreet had ever made. (That record was broken last year when D. & B. paid $1.6 billion for IMS International, a marketing-services company that specializes in the health care business.) Its sheer size and cost meant that D. & B. had to find better ways to marshal its resources. Before, it could dabble in all aspects of the information business; suddenly, it had to decide which aspects of that business it should pursue, and which it should exit.

Accordingly, the company has been divesting companies that do not fit its core businesses of credit, financial and marketing information, and replacing them with ones that do. Besides the Airlines Guide, it sold the Corinthian Broadcasting Company and the Technical Publishing Company. Its acquisitions include IMS and Logistics, a small company that had already been plugging Nielsen data into computer models to help retailers lay out their stores. It even tried to buy Information Resources Inc., a Chicago-based competitor that was becoming a major force in packaged-goods information, but the Justice Department scotched the deal on antitrust grounds.

"D. & B. is focusing on fewer starting points but offering broader services from those points," said Mr. Noble, the Paine Webber analyst.

The Nielsen purchase changed Dun & Bradstreet in more subtle ways, too. Nielsen, although the dominant player in its field, was a stodgy company, one more attuned to servicing old customers than to creating products for new ones. It ran totally counter to the D. & B. culture, which had long revolved around spewing forth new data products at a heady pace. For the first time in its history, D. & B. had to wake up a sleeping giant.

It did so quickly. Many Nielsen manage were retired or fired, and replaced by peo often 20 years their junior. Under Mr Ho direction, they expanded Nielsen's progra for gathering product purchase data in s permarkets and tied that information into television ratings data. And they began ho ing Nielsen's operations in with D. & B direct-mail-marketing services.

IN THE process, D. & B. learned a lot abo how to get different fiefdoms to wo together. And it has been tinkering with organizational charts to see if it can fos more such cooperation.

Last January, for example, it brought domestic and international operations und the same executive vice presidents — M Holt in marketing and Mr. Rutter in credit to see if European operations could lea from their American counterparts, and vi versa. Since then it has formed a new Info mation Services and Technology Group th handles all the back-up and research fun tions for Nielsen Marketing Research, Nie sen Media Research and Donnelley Marke ing, a move made in part to consolida payrolls and in part to get the differe sections to work on joint products.

For the last few years Nielsen has be offering packaged-goods companies — an more recently, toy companies and conv nience stores — new ways to correlate da on how well their products are selling wi data on what commercials purchasers ha seen and what cents-off coupons they ha received. And it has started repackagi much of the data it collects for package goods companies so that it is useful to fo brokers and supermarkets.

All the activity clearly pleases Wall Stre Analysts expect D. & B.'s heady rate growth to continue. Thus, many analys have buy recommendations on the stoc which has been trading at about $54 on t New York Stock Exchange. "D. & B. has compulsive attitude toward dominance, a a compulsive attitude toward growth," sa Peter Falco, a Merrill Lynch analyst. "Wh they muster their financial horsepower, the leave everyone else in the dust."

AT A GLANCE

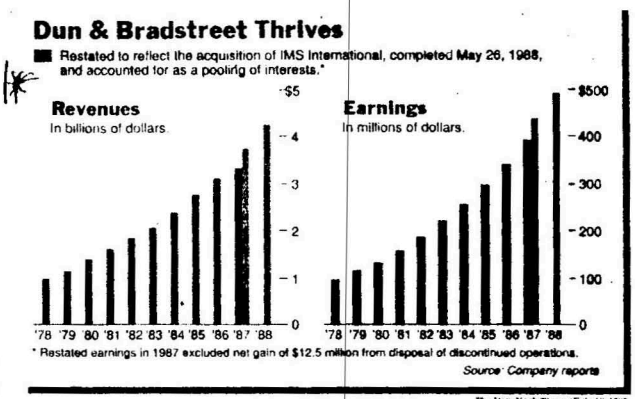
The Dun & Bradstreet Corporation

All dollar amounts in thousands, except per share data.

Three months ended Dec. 31	1988	1987
Revenues	$1,132,449	$1,020,890*
Net income	123,064	104,470*
Earnings per share	$0.66	$0.56*
Year ended Dec. 31	**1988**	**1987**
Revenues	$4,267,377	$3,788,502*
Net income	498,960	439,053*
Earnings per share	$2.67	$2.36*

Total assets, Dec. 31, 1987	$3,753,695*
Current assets	1,729,960*
Current liabilities	996,788*
Book value per share, Dec. 31, 1988	$11.19
Stock price, Feb. 9, 1989 N.Y.S.E. consolidated close	56⅛
Stock price, 52-week range	57⅛–45⅞
Employees, Feb. 9, 1989	61,025
Headquarters	New York

*Amounts for 1987 have been restated to reflect the 1988 acquisition of IMS International, which was accounted for as a pooling of interests.





The New York Times/Chester Higgins Jr.

Charles Moritz, D.&B.'s chairman

D.&B.'s Many Data Bases

D.&B. Credit Services
Credit information on more than nine million U.S. businesses.

D.&B. International
Credit information on more than seven million businesses in Europe, Canada and the Pacific.

Donnelley Marketing
Marketing information on more than 83 million U.S. households.

IMS International
Monthly records of 100 million direct and indirect sales transactions from 550 data sources.

Nielsen Marketing Research
Records of the sales of more than 600,000 UPC-coded products sold in 50 U.S. markets.

Moody's Investors Service
Ratings of almost the entire taxable corporate debt issued in the U.S. and Europe. More than half of the global short-term borrowings of corporations and financial institutions are covered. More than 28,000 ratings on long- and short-term debt of municipal issuers, representing the obligations of some 18,000 state and local government units in the U.S. and Canada.

Source: Company reports

University Science, Engineering
and Technology, Inc.
8000 Westpark Drive, McLean, VA 22102
Tel: 703/821-2030 Fax: 703/821-2049

MEMORANDUM

TO: IRWIN ALPERTS
JACK KARNOWSKI
BOB SIEGEL
RICHARD CARLIN

FROM: NORM LATKER NL

DATE: FEBRUARY 8, 1988

RE: TRIP TO NEW ORLEANS (2/19/89 - 2/21/89)

From February 19-21, I will be attending the Society of University Patent Administrator's (SUPA) Annual Meeting in New Orleans.

If necessary, I can be reached at the Hyatt Regency in New Orleans at 504/561-1234.

January 29, 1988

Paul Nappe
Maxwell Communications Corporation
777 West Putnam Ave.
Greenwich, Conn. 06830

Dear Paul,

Enclosed is an update of the expenditures that I have made on Maxwell's behalf for the weeks ending 1/30/88 and 2/6/88.

The total for 1/30/88 is $153.00 which includes an expense incurred on my last trip to MC Greenwich and entertaining Carl Wootten of UTC in Vienna, VA with Dr. Harmison. I have enclosed a copy of the previous expense report for this same week for reference.

The total for 2/6/88 is $61.26

Sincerely,

Norman Latker

MEMORANDUM

TO: KEVIN MAXWELL

FROM: NORM LATKER NJL

DATE: JANUARY 23, 1988

RE: AGENDA FOR 11 AM TUESDAY MEETING

---

o MCC exit from the business of selling/brokering licenses to university technology to industry is assumed.

o Your clarification is needed on whether exit from license brokering, includes exit from the proposed business of selling information on licensable new products and processes that can be identified from MCC and other electronic or hardcopy databases.

o If MCC intends to pursue creation of a database of licensable new products and processes, exit from the brokerage business at Westport should start with negotiating sale of business back to UPI. This is the most probable way of avoiding the appearance of problems and maintaining publishing and other rights to USET technology.

o If agreed, sale to UPI (or other joint venture) should be conditioned on at least the following:

a) MCC's right to include all present and future USET technology in MCC databases for disclosure to subscribers. Interested subscribers will be directed to UPI for licenses.

b) That MCC receive a percentage of any royalty return or equity UPI earns through the licensing of USET technology.

c) An MCC first right of refusal to invest in development of any USET technology in return for an MCC equity position in the technology.

o To pursue this option or <u>total</u> exit from the entire USET business plan including database creation, I need to be named <u>Acting</u> President of USET for a year. This is recommended to preserve the USET asset base during exiting negotiations.

o If agreed, I need Jack Karnowski as C.E.O. to assist in managing USET at Westport during the exit process.

o If the database concept is to be pursued, I need to be concurrently assigned to operate a unit to create an electronic database of licensable technology. The unit will need authority to deal with Orbit/BRS, Pergamon Press and MacMillan's BBI and the 150 universities and 100 industry contacts we have identified as technology licensing agents. The unit's primary function will be to isolate and obtain the licensable portion of all electronic or hardcopy databases that now commingle science and technology results.

o Marketing of the resulting database could be undertaken through an existing MCC component such as IOD, if the database is maintained as proprietary, Orbit, if it is sold on-line, or a new unit. I recommend that initially the database be maintained as proprietary and information sold on a subscription basis for between $10,000 to $30,000 per industry subscriber.

o It would be helpful to the future of the licensable technology database to permit the USET Houston unit to remain intact until they complete the software intended to manage and upload technology from technology sources.

o The additional sorting software which Houston is developing to simplify on-line searching would be useful but not necessary to search the licensable technology database, if the search is conducted by MCC employees in-house.

o However, the first demonstrations of the sorting software suggests that most on-line users will consider the technology to be superior to that used at Orbit. Since Orbit and BRS are now integrating, now is the appropriate time to evaluate whether the Houston technology is valuable to the MCC units committed to on-line searching.

o After completion of the two software packages, MCC should consider transfer of the Houston staff to Orbit or exit.

o If your interest is total exit without my involvement, then we need to discuss either transfer or severance.

o If you wish to pursue or consider the licensable technology database concept, I will cost the initiative out.

January 19, 1988

Greg Crider
US Department of Commerce
Office of Procurement
Room 6424
14th and Constitution Avenue, NW
Washington, DC 20230

This is to confirm my oral request for the RFI package identified in your January 6, 1988 notice regarding privatization of the National Technical Information Service (NTIS).

Please send the RFI package and details of the January 29 conference for potential bidders to:

Norman Latker
Maxwell Communications Corp.
3515 Woodbine St.
Chevy Chase, MD 20815

Thank you,

Norman Latker

Chevy Chase, MD 20815

TO: Greg Gavin

January 14, 1988

Greg,

Thanks for your assistance on the personnel questions I had the other day. I'm in the process of gathering all the information you need to place the UTC group and me on the Maxwell payroll.

In proceeding the following matters arose:

1. What is the cost to elect disability coverage? - Everyone here (including myself) is interested in coverage. If forms are necessary to elect could you make them available?

2. The Maxwell benefit plan (dated 1/88) mentions a 401(K) plan. Everyone seems interested. How do we join, if the plan is available?

3. UTC pays its people on the 25th of each month. Is it possibe to set-up to pay them on the 25th so there is no pay gap? Further, if Maxwell closes on UTC before Jan. 25, I believe you may need to consider pro-rating their first month's pay.

4. I would appreciate a W-4 form for my use - our fax number is 301-738-0212.

5. Is there a Maxwell policy on leave for legal holidays?

Thank you,

Norm Latker

cc: Lowell Harmison
Carl Wootten

TO: Greg Gavin

January 14, 1988

Greg,

Thanks for your assistance on the personnel questions I had the other day. I'm in the process of gathering all the information you need to place the UTC group and me on the Maxwell payroll.

In proceeding the following matters arose:

1. What is the cost to elect disability coverage? - Everyone here (including myself) is interested in coverage. If forms are necessary to elect could you make them available?

2. The Maxwell benefit plan (dated 1/88) mentions a 401(K) plan. Everyone seems interested. How do we join, if the plan is available?

3. UTC pays its people on the 25th of each month. Is it possibe to set-up to pay them on the 25th so there is no pay gap? Further, if Maxwell closes on UTC before Jan. 25, I believe you may need to consider pro-rating their first month's pay.

4. I would appreciate a W-4 form for my use - our fax number is 301-738-0212.

5. Is there a Maxwell policy on leave for legal holidays?

Thank you,

Norm Latker

cc: Lowell Harmison
Carl Wootten

January 13, 1988

Paul Nappe
Maxwell Communications Corporation
777 West Putnam Ave.
Greenwich, Conn. 06830

Dear Paul,

Enclosed is a record of the expenditures that I have made on Maxwell's behalf for the weeks ending 12/19/87, 12/26/87 and 1/9/88. The totals are as follows:

For week ending 12/19/87: $14.25 covering expenses attached to a trip to MC Greenwich.

For week ending 12/26/87: $901.10 covering trip to visit Telescan in Houston and costs of visiting Carl Wootten, UTC in Washington, D.C.

For week ending 1/9/88: $110.60 covering costs of visit with Carl Wootten, UTC in Washington, D.C.

Sincerely,

Norman Latker

BROWDY AND NEIMARK
ATTORNEYS AT LAW
PATENT AND TRADEMARK CAUSES
SUITE 300
419 SEVENTH STREET, N. W.
WASHINGTON, D. C. 20004
TELEPHONE (202)-628-5197

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SENIOR COUNSEL
ALVIN BROWDY

PATENT AGENT
ALLEN C. YUN, PH.D.

October 27, 1994

Via Facsimile
Jon Sandelin
Stanford University
Office of Technology Licensing
900 Welch Road
Suite 350
Palo Alto, CA 94304-1850

Re: Nomination of Niels Reimers for National Medal of Technology

Dear Jon:

As you know, I have known Niels Reimers since 1969 at which time he was the Director of the Technology Licensing Program at Stanford University and I was the Patent Counsel of the United States Department of Health, Education and Welfare (DHEW, now DHHS). At that point in time, a substantial portion of the research funding which generated inventions at Stanford was provided by DHEW funding. This funding carried with it a number of conditions which DHEW considered necessary to protect its interest which however had the effect of making the licensing of resulting inventions to industry either difficult or impossible. Indeed, in many instances the conditions reserved title in the resulting invention in DHEW thereby requiring a petition by the University to obtain any licensable rights.

Niels was intimately aware of these conditions and we both understood that they seriously impeded the ability of Stanford and as well as all other universities receiving DHEW funding from successfully transferring resulting technology to industry.

Niels further understood that these policies (which were also followed in other government agencies) created a known disincentive to the creation of technology licensing programs throughout the university community. Indeed, in 1969 there were probably no more than ten universities who had assigned staff to pursue the transfer of technology (which was generated in most part by government funding) to industry.

and expanded to cover the inventive results of all federal agencies. The ensuing battle for passage of Bayh-Dole continued from its introduction in 1976 to its final passage in 1980 with Niels being a prominent advocate for its passage throughout its deliberation.

In conclusion, I recommend Niels for the National Medal of Technology with all my heart and with the knowledge that without his courage, conviction and persistence we would not have the vastly expanded technology management program presently functioning in the university community. This expanded community of university licensing programs was generated in response to the certainty of law and policy that Niels so abling and willing assisted in producing.

While I believe that Niels has earned the National Medal of Technology on the basis of only his contribution to the laws and policies now governing university technology licensing programs, I would also in passing note the unique contribution to the university community he made in developing the non-exclusive licensing plan for the Cohen-Boyer gene splicing technology. Prior to this unique plane no one had devised a means for obtaining a justifiable return to a university and its inventors for the licensing of a process invention which required the grant of multiple non-exclusive licenses. Niels solution to this problem has served as the prototype for other similar process inventions emerging at other universities and stands as a contribution to technology transfer programs which should merit the award of the National Medal of Technology on its own merit.

Thank you for the privilege of supporting Niels for award of the National Medal of Technology.

Sincerely,

N. J. Latker

Norman J. Latker
Attorney Director

NJL:edg

for the licensing of a process invention

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SENIOR COUNSEL
ALVIN BROWDY

PATENT AGENTS
ALLEN C. YUN, PH.D.

August 10, 1994

Mr. Lee W. Rivers
NATIONAL TECHNOLOGY
TRANSFER CENTER
Wheeling Jesuit College
316 Washington Ave.
Wheeling, WV 26003

Re: NTTC's Technology Managers Advisory Board

Dear Lee:

Thank you for your invitation to become a member of the Technology Managers Advisory Board. I am very pleased that you think I might be of assistance. I look forward to being actively involved and plan to attend the September 14, 1994 meeting.

Thank you again.

Sincerely,

Norman J. Latker
Managing Attorney

NJL:ekd

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FAXED 8/9/94

Intellect Partners

2275 East Bayshore Road, Suite 108 • Palo Alto, CA 94303
Telephone: (415) 852-9600 Fax: (415) 852-0600

To: Mr. Norman J. Latker **Date:** August 9, 1994

At: Browdy & Niemark **Fax:** 202 737-3528

From: Niels Reimers **Page:** 1 of 1

Dear Norm,

I read with pleasure of your well deserved Vannevar Bush Technology Transfer Award. Has Joe Califano sent you a bouquet yet?

Seriously, its great that you have been recognized for your many contributions to technology transfer. I hope all has been going well for you in the outside (of government) world although I would think you are spending at least some time indulging your anglophilic interest.

Just so you know what I've been doing in the outside (of academia) world, an Intellect Partners brochure will be mailed to you, along with a copy of this fax.

If you are out this way, please stop by.

Best regards,

Nils

RECEIVED
AUG 15 1994
Browdy & Neimark

The next meeting of the Technology Managers Advisory Board is scheduled for **Wednesday, September 14, 1994,** from 10:00 a.m. to 3:00 p.m. It will be held at the:

Crystal Gateway Marriott
1700 Jefferson Davis Highway
Arlington, VA 22202
Phone: (703)920-3230
Fax: (703)979-6332

Also, attached is a list of the Advisory Interboard Committees that will be meeting from 3:00 to 5:00 p.m. **Tuesday, September 13, 1994,** at the above location. Afterwards, from 5:30 to 7:00 p.m., please enjoy refreshments and conversation with members from all three advisory boards at a reception. You are welcome to attend this social event even if you're not currently on an interboard committee.

A block of sleeping rooms has been reserved at this hotel for your convenience. Through August 29, 1994, you are guaranteed a nightly rate of $103.00 when you identify yourself as an attendee of the NTTC meeting. To make a reservation, please call the hotel directly or (800)228-9290.

I hope you will accept my invitation to become a member of our board. A list of the current members of all our advisory boards is enclosed for your information. I am looking forward to your response.

Sincerely,



Lee W. Rivers
Executive Director

Enclosures: Advisory Boards Rosters
Advisory Interboard Committees Roster
NTTC Informational Materials

R&D TECHNOLOGY TRANSFER

National Tech Transfer Center Excels at Matchmaking

Philip Swanson is a happy camper. After months of bouncing across the country attending conferences, meetings, and seminars in an effort to gain access to federal laboratory technology on environmental restoration and waste management, he heard about the National Technology Transfer Center (NTTC), Wheeling, WV.

"It were as though I was awash at sea, caught in a whirlpool of endless loops, when suddenly I saw this ray of light—the warm glow from NTTC's beacon," says Swanson, a principal consultant at Concord Associates Inc., Knoxville, TN.

Established by Congress in 1992, NTTC provides a one-stop gateway to the vast amount of technology contained in the U.S. federal laboratory system. With one toll-free telephone call, you can speak to a skilled agent who will search the center's information resources and provide laboratory contacts for your specific needs.

"Of course, when I first learned about NTTC's generous claims, I was skeptical," admits Swanson. "But since there would be no cost to my company, we had nothing to lose. In my initial contact, I spoke to an advisor who promised a response to my requests within 48 hours. And, to my amazement, I got it!

"Through the NTTC system, we were directed to a proper point of contact within the federal lab system—Ames Laboratory. But our success did not stop there. Researchers at Ames referred us to appropriate staff members at Oak Ridge National Laboratory and Idaho National Engineering Laboratory as well. So with NTTC's assistance, we developed our own effective network of federal lab personnel," says Swanson.

"We take $25 billion of research and 100,000 scientists working in 700 federal labs, and reduce all that to two or three people who can directly interact with your company," says Lee Rivers, executive director of NTTC. "Not only is our system extremely user friendly, it provides this service without any charge to you."

Although the program is designed primarily for American businesses, foreign companies operating in the U.S. are welcome to call, and their requests will be considered on an individual basis.

"Generally, clients call us for one of three reasons," says Jerome Bortman, operations director at NTTC. "The first is for technical assistance. Another type of inquiry is to explore licensing opportunities, and the third reason is a willingness to participate in a joint R&D effort."

Under the National Competitiveness Technology Transfer Act of 1989, federal agencies are encouraged to enter into Cooperative Research and Development Agreements (CRADAs) with the private sector. "We do the matchmaking for companies considering a joint research and cost sharing program with a federal laboratory," says Bortman.

In addition to matching up companies with appropriate federal lab staffers, NTTC has established a separate fund for strategic partnering. Through this program, the center is seeking proposals from industrial firms that offer innovative ways of bringing federal technology to the marketplace.

"We're not interested in just transferring federal technology," says Jeffrey Shick, NTTC's associate director of planning and development. "We want to ensure that we impact on how American value-added producers think about technology. We try to bring a human voice to industry's concerns and encourage change in the direction of technological innovation."

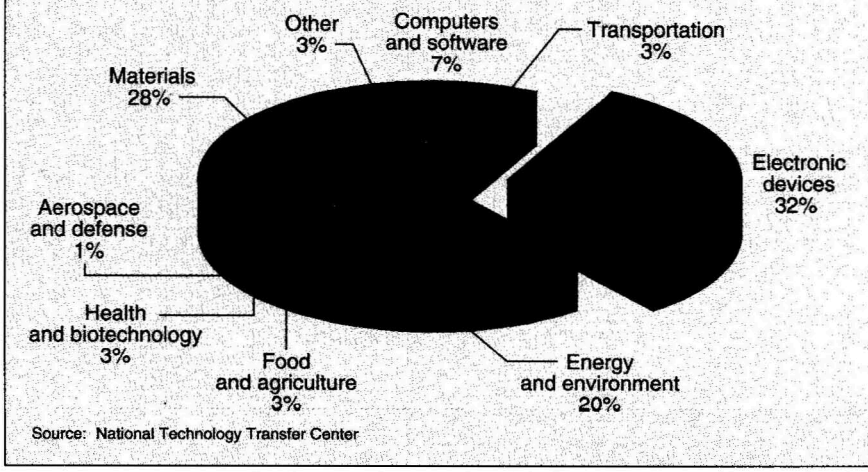
In addition to small businesses gaining access to the right people within a federal agency, their ability to attract financing from the investment community can be dramatically enhanced because of their increased stability and proper focus.

"It's refreshing to be helped," says Concord's Swanson. "A small business usually has to stand on its own to get things done. Since our first experience with NTTC has been so worthwhile, I'm sure we won't stop with just one CRADA."

—Howard Goldner

Technical requests: 800-678-6882.
Additional information: 304-243-2456.

Requests for Tech Transfer Information Come From Many Disciplines



***Over 1,500 American businesses,** large and small, from a variety of industries, have already contacted NTTC seeking access to federal laboratory technology.*

Reprinted from **R & D Magazine** June, 1993
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HBCUs/MIs
Technology Apprenticeship Program

The goal of the Technology Apprenticeship Program (TAP) is to encourage qualified graduate and undergraduate students to pursue careers in technology management. Students will gain comprehensive hands-on training and a structured and systematic exposure to "real world" work experiences while providing organizations involved in technology management with focused, energetic additions to their office environment.

The development of a national apprenticeship model, administered by the NTTC, will place students from the Historically Black Colleges and Universities/Minority Institutions (HBCUs/MIs) in a nine month tuition-free apprenticeship positions in technology management, industrial extension, and technology based manufacturing.

Students will gain valuable skills and contacts in the following areas:

- **Federal laboratories** to gather technology management skills and gain an understanding of the federal R&D environment.
- **Manufacturing Technology Centers** (MTCs) to learn how to assist small and large companies with manufacturing problems.
- **Technology-based manufacturing organizations** to learn how these companies operate in conjunction with federal laboratories and MTCs.
- **Research university technology transfer programs** to gather technology management skills and gain an understanding of the university R&D environment.

The TAP will also assist:

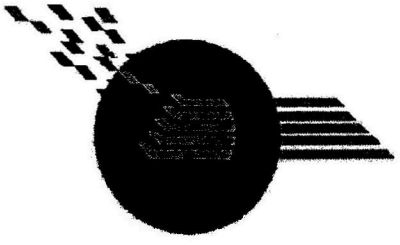
- HBCUs/MIs in the development and implementation of support curricula and prepare students for the program, and
- Creation of a network of mentors to guide, to support and to act as role models for each student.

Participating HBCUs/MIs

University of Arkansas at Pine Bluff
Central State University
Hampton University
Tuskegee College
West Virginia State College

Participating Agencies

Department of Commerce (NIST)
Department of Defense
NASA
Department of Energy
Environmental Protection Agency
United States Department of Agriculture



For more information contact
1-800-678-NTTC
The National Technology Transfer Center

The National Technology Transfer Center, Wheeling *Jesuit* College, 316 Washington Avenue, Wheeling, WV 26003

NATIONAL TECHNOLOGY TRANSFER CENTER

SUCCESS STORIES

PHONE CALL TRIGGERS NEW PRODUCT, JOBS

A Pittsburgh area manufacturer of microscope products expects to increase its sales dramatically and hire several new employees, all because of a new product developed with key support from the federal laboratory system.

E.A. Fischione Instruments, Inc., of Export, Pa., manufactures systems that prepare samples for electron microscopy. When the company called the NTTC in November 1992, it was having technical difficulties with development of a product called an ion mill, a device used in thinning specimens so they can be seen under the microscope.

NTTC technology agent Bob Marmo referred the company to several labs, including Lawrence Berkeley in California. There, tech transfer agent Bill Cooper enlisted the help of Dr. Ian Brown, a specialist in ion technology and argon plasma.

Nearly every week for six months, Brown spoke with Fischione on the phone. His expert advice helped to guide the company through the crucial stages of product development.

"It was real, fundamental R&D support," said Bob Spelic, vice president/engineering for the 28-year-old company based in the eastern suburbs of Pittsburgh. "The product that came out of this investigation should increase our sales quite dramatically."

Paul E. Fischione, company president, said that for every hour or two Brown spent on the phone each week, the company probably saved 10 to 20 hours of time. By asking Brown's advice and tapping his expertise, the company avoided some of the false starts and dead ends that always accompany new product development.

The company built five prototype ion mills last year and placed them in working laboratories for tests. Fischione hopes all five will purchase the instruments at a price in the $40,000 range. The company's other instruments sell for $3,000 to $10,000, so the extra dollar volume could double sales, Fischione said.

"It's one of those situations where the government is really benefiting small business," he said. "If you're looking at the NTTC program, this is a textbook example of how it's supposed to work."

The company has already hired its seventh employee as a result of the ion mill project, and it expects to hire three more in the next six to 12 months: a product assembler, a machinist and an electronmicroscopist to do product support in technical publications.

After selling its other products from a catalog and over the phone, Fischione is also starting to build a network of manufacturers reps to sell the ion mill face-to-face. "In the $3,000 to $10,000 range there wasn't a need for real personal contact," Fischione said.

He explained the science behind the development of the ion mill. It works like this:

To be observable under an electron microscope, a specimen must be thin enough for an electron beam to penetrate. The ion mill charges an argon atom and accelerates it to the specimen. The bombardment of ions on the specimen surface removes material from the sample, thinning it to permit transmission of the electron beam.

Before contacting Lawrence Berkeley, the company had been able to generate the argon plasma and the ion beam, but was not achieving the necessary rate of specimen material removal.

Along the way, Brown helped the company understand that the configuration of the ion gun was leading to inaccurate measurements.

Fischione has been showing the ion gun at conferences, but the biggest of all is still on the horizon. He plans to unveil the new product in July at the International Congress on Microscopy in Paris.

2/15/94

NTTC CALL = R&D SHORT CUT

ARPA grants, CRADAs, licensing agreements, dual use technologies, new products and processes -- these are yardsticks of success in technology transfer.

When the National Technology Transfer Center refers a caller to the federal laboratory system, however, the benefits cannot always be measured in terms of tangible products. By reviewing research findings, a company may learn that its square wheel won't roll, or that round wheel technology already exists. Either way, the company saves money and precious R&D time.

A case in point is the National Captioning Institute in Falls Church, Virginia, a not-for-profit company serving the hearing impaired market.

Under founder John Ball, the institute developed the computer chips and decoders that permit display of simultaneous written text on live and taped TV programs. With about 230 employees, the 14-year-old company has about a 70 percent market share, and supplies decoders to the other 30 percent. "I suppose someone could call us the General Motors of closed captioning," said Gary Chase, consulting product engineer.

In addition to closed captioning, the institute is working on an automated process to convert closed-captioned data into Braille, and on a 60-inch Windows computer screen that employs virtual reality.

NCI envisions a process of fully automatic captioning that processes the words spoken on a TV talk show, for instance, and immediately converts them into closed captions or Braille.

Creation of such products, however, depends on technological advances outside the scope of NCI's own R&D efforts. To monitor developments in closed captioning, high-definition TV, reading radio, inner ear simulation and speech recognition systems, Chase has made an ongoing series of calls to NTTC.

Referrals by technnology agent Jim Atkinson have been "extraordinarily helpful," Chase said. The contacts made him aware of the automatic reservations system now in use at American Airlines, using a speech recognition system that, in effect, permits question-and-answer conversations between humans and a computer. "It's so good you don't know whether you're talking to a human."

Through the referrals, Chase also arranged for SRI to visit the institute and demonstrate its speech recognition system. News of SRI's research came to him like "a bolt out of the blue."

convert closed-captioned data into Braille, and on a 60-inch Windows computer screen that

With six requests to date, Chase has been a frequent user of NTTC services. "Basically, the requests have been points of information for internal discussion. In a number of cases, we've determined there is no market because someone's already doing it, or is further along."

Instead of duplicating efforts, the institute can channel its R&D efforts elsewhere. Once speech recognition systems are perfected, they will have a direct and immediate application in closed captioning. And because of continuing contact with SRI, the institute will be there when this happens.

2/23/94

CHEMICAL COMPANY SIGNS TWO CRADAS, BEGINS FIELD TESTS

A small California chemical company has one new product on the market and two more in development at the Naval Research Laboratory as result of contacts and references supplied through the National Technology Transfer Center in Wheeling, W.Va.

Catalytica Associates (NASDAQ: CTAL), formed in 1975 and headquartered in Mountain View, Ca., has about 120 employees. It works primarily with the chemical industry in the area of catalysis, doing contract research work and manufacturing sensors and other products. Much of its recent work has been in the areas of chemical manufacturing, nitrogen oxide emissions reduction and production of catalysts for high octane gasoline.

Now the company is moving in new directions. It recently signed two separate Cooperative Research and Development Agreements (CRADAs) with the Naval Research Laboratory (NRL) in Washington, D.C. In another area, it shipped continuous emissions monitors to a Fortune 500 company for field testing and potential sale.

The larger company, anticipating new state emissions standards under the 1990 Clean Air Act, called the NTTC in July 1993 to inquire about current developments in the area of continuous emission monitoring (CEM) for its stacks.

Within four days, NTTC technology agent Fred Bruno had faxed the company a set of CEM references from various databases. Included was a information about Catalytica emissions monitors that Bruno found in a database of Small Business Innovation Research (SBIR) grants from the Small Business Administration. Within a week of the initial call, the fuel company had talked with Catalytica and had begun laying groundwork for field-testing of the devices.

The first prototype monitors were shipped this spring. Results are anticipated later this year.

The monitors are mounted a few feet away from the emissions source, compared to 1,000 feet for the monitor currently in use. Also, the current monitor is priced in the $200,000-$250,000 range, and Catalytica expects to sell its model for a fraction of that price.

On another front, Catalytica called NTTC on a "fishing expedition" for new products, explained Paul Schubert, director of operations for the company's Advanced Sensor Devices division. This time, working through technology agent Harry Samos, Catalytic benefited from a database search that identified sensor technologies at the NRL. Catalytica saw dual uses that the Navy had not yet considered.

Subsequent discussions between Catalytica and NRL resulted in the two CRADAs this spring, one in the area of environmental monitoring and the other in the area of novel manufacturing techniques.

Within four days, NTTC technology agent Fred Bruno had faxed the company a set

"The whole project was based on trying to figure out how to use technology they had developed, in a novel and useful way," Schubert said.

Catalytica had no previous experience in dealing with the Navy. "It would have been very difficult for us to get into those places," Schubert said.

The experience showed him the willingness of federal laboratories to engage in technology transfer. Schubert believes the laboratories now "look for ways to commercialize the technology. They become interested in dealing with companies like ourselves. In the past I don't think that would have occurred."

The database searches made it happen, leading Catalytica to the technologies it now is attempting to commercialize. "In the case of NRL, we wouldn't have found it," Schubert said. "NRL really was a new connection, and it was set up by you guys" at NTTC.

The problem, Schubert explained, has been finding a market for the new sensors. The new connections with NRL and the fuel company are helping Catalytica take the next step, from making sensors to making complete environmental monitoring systems with instruments.

5/25/94

NTTC CALL RESULTS IN CRADA

A chain of events triggered by a magazine article and a telephone call has led to a Cooperative Research and Development Agreement (CRADA) between the Naval Research Laboratory and a Rhode Island company.

The Navy connection is expected to result in a new product for Federal Products Co., of Providence, R.I., a manufacturer of dimensional measuring equipment for the machine tool, aircraft, automotive and general metalworking industries.

The CRADA agreement was completed in February, following the earlier award of an Advanced Research Project Agency (ARPA) grant to Federal Products and NRL.

"We had never done a CRADA or an ARPA proposal before," explained senior research engineer Fred Parsons.

"We are a manufacturing company that has always relied on developing our products internally. What we are finding now is the cost of developing new technology is practically prohibitive. We are really exploring a new direction and getting a new source of funding," Parsons said.

The new product is called a linear displacement sensor. Jack Hubbard, president of Federal Products, described it as a "brand-new product with a brand-new technology, which can enhance America's industrial competitiveness."

The company began its pursuit of the product more than two years ago, but a critical piece of the puzzle was missing. Off and on for about a year, Parsons had been making calls and combing the library for a specific piece of technology, all to no avail. "The material was there. I had just not come across it."

Parsons called the National Technology Transfer Center after reading a story about it in the December 1992 issue of R&D magazine.

"I just thought I'd give it a try," he said. A database search, instigated by NTTC technology agent Robert Baird, turned up the requisite technology within the federal laboratory system. Soon Parsons was visiting NIST in Boulder CO and the NRL in Washington, D.C.

"The contacts allowed me to take giant steps forward. I doubt very much I would have bumped into the people at NRL (Naval Research Lab), who are the people we wound up doing business with."

The Navy contacts helped Federal Products write the ARPA proposal, and the award was made in December. Then, on Feb. 14, NRL signed a CRADA with Federal that provides for two years of R&D on the new product.

Federal Products described it as a "brand-new product with a brand-new technology, which

The 74-year-old company regards the product as a natural next step in its product line. Federal began making dial indicators in 1920, and later branched into air gauges and then electronic gauges. Esterline Corp. acquired Federal in 1969.

Parsons said he envisioned a significant impact on employment and sales in the company, which currently has about 400 employees. Parsons cautioned, "There could be some stone walls in there that we can't hurdle."

2/23/94

LAND-HARPOON MOVES CLOSER TO MARKET

Working for a company that fought fires at oil installations, Walter Herman developed an idea for a new piece of firefighting equipment.

He called it the Land-Harpoon. It was a cannon in the back of a pickup truck, and it could shoot a fire hose or a canister of fire retardant into the heart of a fire. The idea was to use steam to extinguish out-of-control fires too hot for fire trucks, and in war zones too dangerous for aerial drops.

Herman's invention is now beyond the idea stage. A prototype developed with help from the Army and Navy is now in storage in Sarajevo, awaiting his return this spring.

The Land-Harpoon was airlifted to the former Yugoslavia last September in a relief shipment aboard a C-150 transport. Herman followed it there in November under the auspices of Rhode Island firefighter John Jordan and his Global Operations Fire and Emergency Rescue (GOFER) team. Herman went home after a scheduled Land-Harpoon training session was canceled because of heavy shelling.

Herman, a marine engineer and Vietnam vet who lives in Abingdon, Va., has spent the last six years developing the Land-Harpoon. In its present configuration, it's a 3,700-pound cannon with a 5-foot barrel, mounted in the bed of a pickup truck.

It works two ways. A crew of two operators can point it and shoot a canister of fire retardant from as far as a mile down the road. Or they can use the projectile nozzle that gives the Land-Harpoon its name. It's a cluster of 18 nozzles at the end of a coiled 100-foot treated cotton hose attached to a pumper and shot from the cannon. Once the entire hose is played out, an 8-foot tether hose brakes the descent.

The steam then takes over. Its ability to pull 300 times its heat capacity makes it a more effective fire retardant than water, Herman explained.

He built the Land-Harpoon prototype in 1989 and 1990 with help from various military facilities in Virginia. He performed tests on ranges at Fort Belvoir and Quantico and, with an admiral's blessing, used Norfolk International Airport for demonstrations and further tests. Herman received a patent and entered a development deal with Brunswick Corp., a defense contractor with production facilities in Marion, Va., near his home.

As a one-man operation, Herman has discussed Land-Harpoon orders with city fire departments, a foreign government and a federal law enforcement agency. He hopes the potential orders will attract a partner to produce and market the Land-Harpoon under a licensing agreement.

"The technical development, I have that well handled," Herman said. Sales and marketing posed another kind of challenge, and Herman needed all the help he could get.

He turned to Mike Bellovin, technology transfer agent at the Defense Fire Protection Association (DFPA) in Alexandria, Va. Bellovin maintains extensive contacts inside and outside the federal government, and in his capacity as an information broker has made numerous requests through the National Technology Transfer Center (NTTC) in Wheeling, W.Va. Technology agents at the NTTC provide information about research projects and capabilities at federal labs, and Bellovin passes along that information in reports to his members.

"I go to members and say I think the gadget you've got has another application," Bellovin said. "I identify needs by looking through the lists of provider labs."

The DFPA led Herman to Army and Navy contacts, and eventually to Brunswick. Without the DFPA, he said, "A guy like me would never have gotten to the door. I'm not a G.E. or a Westinghouse. I'm not one of the big players. "

The Air Force had worked on a system to shoot canisters of fire retardant, and Herman built on their work. "They hadn't thought of putting the firing cap at the end of the barrel," he said. "It all goes back to establishing yourself with the right people. The past two years, that's all I've done."

The launcher had to be developed from scratch. Herman needed an algorithm to permit precise targeting with projectiles at a range of speeds from 40 feet per second to 400 feet per second.

Herman used the Navy firing range in Quantico, Va., to test and improve precision of his targeting system. The state of Virginia gave him a $35,000 grant and steered him to Old Dominion University, where researchers improved the firing cap.

It was that connection to the laboratories, Herman believes, that helped tip the scales in his favor when Brunswick was considering production of the Land-Harpoon. The company, he said, "was on the edge to do a deal or not do a deal." Bellovin had a four-hour chat at the company, where he vouched for Herman and what he already had been able to accomplish with help from the laboratories.

The prototype shipped to Bosnia was not meant as a marketing tool, Herman said. He thought of Bosnia as a place "to get it field-tested in the worst conditions."

GOFER has a mandate and a little funding from the United Nations High Commission on Refugees to help improve firefighting conditions in Bosnia. "For every home saved, there's one less refugee," explained Beth Hoban, speaking from GOFER offices in Washington, D.C.

Before the war, she said, Sarajevo had a well-equipped and modern fire department. It was part of the general prosperity generated by the 1984 Winter Olympics there.

The war, she said, has killed about a dozen firefighters and wounded perhaps 50 more in a department of about 300.

Last fall Hoban and Jordan drove to the Serb-held command post, and made their proposal for a November training session for firefighters. The plan was approved, but when the time came there was so much shelling the U.N. forces couldn't guarantee firefighters safe passage. "When you're dealing with a war-type situation, you can't plan anything," Hoban said.

One plan, though, is solid. "We want to get Walter Herman back there," Hoban said.

2/10/94

NTTC: KEY LINK IN WOOL EFFORT

NTTC played a key role as a catalyst for a project that may help American wool and cotton producers solve a serious quality control problem.

The source of the problem is two-inch polypropylene cord ends that fly out of automatic hay balers used by thousands of American farmers. The machine wraps the cord around the hay, ties a knot and snips off the cord end, which falls to the ground.

Along comes a herd of sheep to lie on the ground, roll on the ground and sleep on the ground. Cord ends inevitably become tangled in their wool. They unravel and blow in the wind, virtually invisible and undetectable.

But once the wool has been processed, dyed and woven into a sweater, those same fibers stick out like searchlights. Unlike wool fibers, they don't absorb the dye. Also unlike wool, poly fibers can lie on the ground for decades without decomposing.

By wool industry standards, a single polypropylene cord end can contaminate tons of wool. On the global market, contaminated wool fetches a small fraction of the price of 100 percent virgin wool -- and that's only if the wool producer can find a buyer. The situation worries American wool producers trying to compete against virgin wool producers in Australia, New Zealand and elsewhere.

Last year the problem came to the attention of Dr. William Marmer, an organic chemist at the USDA Hides, Leather and Wool Research Unit in Philadelphia. As the research leader of the unit's wool project, he had thought about using ultrasonic equipment to detect polypropylene in submerged wool and possibly dissolve the fibers, but his own lab lacked the necessary expertise in electronics and instrumentation. "That's why I contacted you people," Marmer explained, remembering the call in March 1993.

NTTC technology agent Sergio Lopes referred Marmer to the Idaho National Engineering Laboratory (INEL), which brought a sister DOE lab into the discussion. Marmer traveled to Colorado last spring and Idaho last fall for discussions with DOE and trade associations representing wool producers and cotton producers, who are finding poly fibers tangled in cotton plants as they grow.

The April meeting in Denver, billed as a summit on cord ends, also attracted farm equipment manufacturers and polypropylene producers with a stake in the problem.

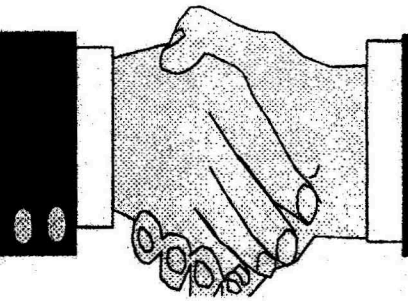
"There's been a lot of sensitivity training, but not many dollars," Marmer said.

The meetings, however, left him hopeful of research funding, possibly in conjunction with the $30 million CRADA signed last March between DOE and the American Textile Partnership (AMTEX).

If the technical solution still lies in the distance, the process of finding it has begun -- with a boost from the NTTC.

"You were a catalyst in bringing together these groups," Marmer said. The first contact is still the best contact, "and you did it."

2/24/94



Business Gold
NTTC Online

Welcome to Business Gold -- NTTC Online, the National Technology Transfer Center's electronic bulletin board system. Attached you will find a Business Gold handout. The handout will provide you with the basic information needed to access the system.

Business Gold is accessable through direct dial-up or through the Internet. Internet users simply telnet to iron.nttc.edu and login as visitor. Business Gold is a "free" service. There are no connect, usage, or report charges. All information on the system is public and can be downloaded to your own computer.

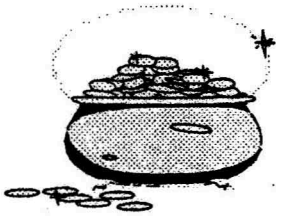
Once you sign on to the system and register for your own account, you will receive the Business Gold user guide and be placed on the mailing list to receive announcements, updates, the NTTC newsletter, as well as other information. Welcome to Business Gold!

Sincerely,

Pamela G. McIntyre
System Administrator

Business Gold

NTTC Online



Troubleshooting Guide

No Connect: If your modem is dialing correctly but you do not get a "connect" message, either your modem or communications software are not set up correctly. Check your parameters. Make sure you are dialing the right phone number.

Garbage: If you get a connect but strange characters display on your screen, make sure your software is set to seven(7) data bits. Also make sure you are using either a vt100 or vt102 emulator.

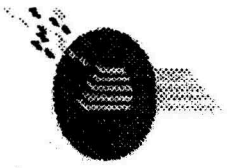
Hanging: If nothing happens after the "connect" message, try sending a break signal. Check your software manual for how to do this. Make sure you are dialing the right telephone number.

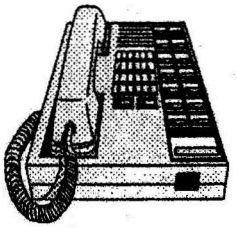
No Answer: If you cannot seem to get through to the system, listen to your modem and make sure you hear a dial tone. Make sure you are dialing the right phone number along with any access code for long distance or an outside line such as a "9" or a "1" for long distance.

Other: Other things to try include dialing in at a different modem speed, trying another software package, trying another modem as a test.

Windows Users: If you are using Windows Terminal, make the following change. Enter the 'Settings" menu, select Terminal preferences and make sure the "Use function and arrow keys for Windows" box is NOT checked. If this box is checked, you will not be able to use your arrow keys on the Business Gold system.

For more help contact Pam McIntyre at (304) 243-2570.





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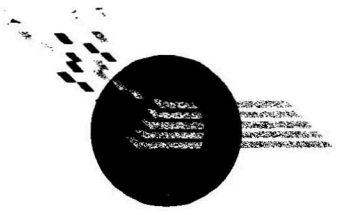

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NORMAN J. LATKER RECEIVES FIRST VANNEVAR BUSH AWARD
WASHINGTON, July 11 /PRNewswire/ -- Norman J. Latker, a recognized expert in the field of federal technology transfer, has been named the first winner of the Vannevar Bush Award for significant contributions to the U.S. in technology management aimed at furthering America's economic competitiveness, the Association of Federal Technology Transfer Executives (AFTTE) announced today.

The award will be presented during ceremonies at 9:00 a.m., Wednesday, July 13, The Grand Hotel, 2350 M Street, NW, Washington, D.C., by AFTTE. AFTTE was formed in 1992 to bolster the professional development, training and education of technology transfer personnel within the federal government.

Department of Commerce's Deputy Under Secretary, Gary R. Bachula, will present the award on behalf of AFTTE.

Increasing American global competitiveness through the use of technologies developed in federal research facilities is a key federal government activity and priority of the 1990s.

President Bill Clinton said, "The private sector must maintain the initiative to keep our technological edge, but government has an indispensable role. The extraordinary talent at our national laboratories must be utilized to keep the U.S. at the forefront of civilian and military technology."

Latker helped create the mechanisms for fostering U.S. public and private sector economic cooperation that is becoming a keystone of U.S. economic policy.

While almost every other budget segment was cut, the administration asked for more than $71 billion in spending for

federally funded R&D in fiscal year '95, roughly a 4.1 percent increase over current levels. The civilian R&D budget would climb $1 billion to $32 billion.

AFTTE President Joseph P. Allen, director of Training and Economic Development with the National Technology Transfer Center (NTTC), said the Vannevar Bush Award is presented to an individual who has furthered U.S. economic competitiveness through significant contributions to the field of technology management.

Allen said the award honors the memory of Vannevar Bush, who had a long and productive career as a scientist, inventor and government official.

"In essence, Bush became the father of government support for research and development activity that we know today," Allen said. "It is fitting that the award recognizing significant contributions to technology management carry his name."

Bush suggested how to re-direct World War II's research and development (R&D) effort into civilian uses to President Franklin D. Roosevelt. Latker spearheaded public technology management by helping craft laws and their implementation allowing R&D to benefit U.S. private companies.

Bush pointed out to President Roosevelt in "Science: The Endless Frontier," that for the U.S. to get ahead in international trade, there must be a stream of new scientific knowledge to turn the wheels of private and public enterprise.

Bush's recommendations are being realized because Latker's later work allows universities and federal laboratories to

manage their research and partner with U.S. industry to pursue commercial markets. Latker was instrumental in the Bayh-Dole Act of 1980, which opened universities to collaborative R&D, and the Federal Technology Transfer Act of 1986, which opened federal laboratories.

Latker is a pioneer in seeing the contribution that the federal laboratories could make to the U.S. economy based on the success of the universities' collaboration with U.S. industry.

Latker, managing attorney with the Washington, D.C., firm of Browdy and Neimark, has a long history of contribution to the field of federal technology commercialization through his work allowing universities and federal laboratories to team with U.S. industry to commercialize new products.

Latker was the first director of the U.S. Department of Commerce's Office of Federal Technology Commercialization. Prior to that he served as patent counsel of the National Institutes of Health.

As a result of Bayh-Dole, the amount of industry funds invested in university R&D increased 160 percent since 1980. Meanwhile, the number of patents being produced by universities increased 500 percent since 1980.

The National Science Board's 1993 Science & Engineering Indicators notes that the university sector is performing a larger share of research in the U.S. than in the past. In 1985, universities performed 9 percent of the total R&D, but by the end of 1993 that figure has risen to 13 percent. In contrast, the amount of R&D performed by industry fell from 72 percent to 68 percent. However, some decline is attributed to growing university/industry teaming set forth in the Bayh-Dole Act. The

entire nation has entered a new phase of partnership between the public and private sectors because of the tools Latker created.

The 1993 direct economic returns from academic technology transfer include: $9 billion of products sold, 53,000 new jobs, $1.8 billion in tax revenues to all levels of government and an economic impact growth rate of 25-30 percent per year.

Federal laboratories are now beginning to make similar progress. -0- 7/11/94 /CONTACT: Gerrill Griffith or Diane Hedinger of NTTC, 800-678-6882/
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Re: Nomination of Niels Reimers for National Medal of Technology

Dear Jon:

As you know, I have known Niels Reimers since 1969 at which time he was the Director of the Technology Licensing Program at Stanford University and I was the Patent Counsel of the United States Department of Health, Education and Welfare (DHEW, now DHHS). At that point in time, a substantial portion of the research funding which generated inventions at Stanford was provided by DHEW funding. This funding carried with it a number of conditions which DHEW considered necessary to protect its interest which however had the effect of making the licensing of resulting inventions to industry either difficult or impossible. Indeed, in many instances the conditions reserved title in the resulting invention in DHEW thereby requiring a petition by the University to obtain any licensable rights.

Niels was intimately aware of these conditions and we both understood that they seriously impeded the ability of Stanford and as well as all other universities receiving DHEW funding from successfully transferring resulting technology to industry.

Niels further understood that these policies (which were also followed in other government agencies) created a known disincentive to the creation of technology licensing programs throughout the university community. Indeed, in 1969 there were probably no more than ten universities who had assigned staff to pursue the transfer of technology (which was generated in most part by government funding) to industry.

Further, even among the few existing technology licensing programs, there was no known successful licensing of an invention made with government funding with a definitive royalty return. Since a substantial portion of university research was government funded, the absence of successful licensing of government technology acted as a disincentive to creating technology licensing programs at other universities.

It was within these difficult circumstances that Niels began the long course of action required to change the then existing government policies impeding the transfer of government funded technology. Niels' personal courage in undertaking a primary role in advocating change cannot be overstated because at the time there was little evidence that one could succeed given the vested interests surrounding the existing policies.

Notwithstanding, Niels took a public position at Stanford in pursuing the changes that are now reflected in the Bayh-Dole Act of 1980 (P.L. 96-517). Indeed, without the visible public support of Niels it would not have been possible for government officials such as myself to have assisted in pursuing the necessary changes.

Between 1969 and the passage of the Bayh-Dole Act which serves as the foundation for all university technology licensing programs, Niels participated in instituting administrative change in policy which found its way into Bayh-Dole. For example, when DHEW recognized through Niels efforts that its prior policies were impeding the transfer of technology, Niels contributed heavily in the development of the DHEW Institutional Patent Agreements which established a first option in any DHEW funded invention in any University having an established technology transfer program. Indeed, through Niels' effort, Stanford was one of the first universities to enter into such an agreement, which later served as the prototype for the conditions of ownership established in Bayh-Dole. From 1970 through 1975, approximately 75 such agreements were executed between DHEW and universities. This greatly expanded the number of technology transfer programs throughout the university community. These programs later formed the nucleus of the Society of University Patent Administrators (now AUTM) in 1975.

Unfortunately, in 1976 the execution of new patent institutional agreements was brought to a stop by DHEW on the basis that successful transfer of DHEW technology could escalate medical costs. At that time, Niels realized that the administratively created DHEW Institutional Patent Agreements no longer served to promote the certainty of ownership in universities necessary to maintain a successful technology transfer program. Again Niels took a public position advocating that the DHEW Institutional Patent Agreement be established in law

[illegible] passage of the Bayh-Dole Act which

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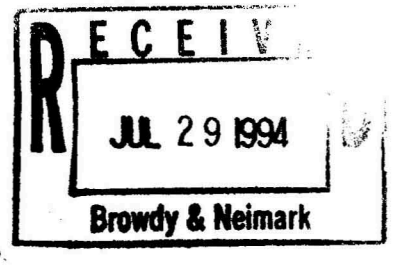

Mr. Norman J. Latker
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Dear Norm:

I enjoyed speaking with you at the Association of Federal Technology Transfer Executives (AFTTE) conference in Washington, DC. Congratulations again on receiving the Vannevar Bush Award for your significant contributions to the field of technology transfer.

As we discussed, I am pleased to invite you to become a member of the National Technology Transfer Center's (NTTC) Technology Managers Advisory Board.

The NTTC's approach to accomplishing our mission is multifaceted, as you will see in the enclosed informational materials. Due to the diversity of our projects, we benefit greatly from the input and guidance of experts such as yourself.

The NTTC was established by Congress to strengthen the competitiveness of American industry by assuring that business has rapid and productive access to marketable federal technologies and by promoting collaboration between companies and federal laboratories in the development and commercialization of technological products, processes, and services. The mission of the Center is to:

- Strengthen the competitiveness of American industry by assuring that business has productive access to marketable federal technologies and expertise by promoting collaboration between United States companies and federal laboratories.

- Access federal research results, facilities, and know-how in a manner which facilitates incorporation into commercially relevant technological products, goods, and services.

- Promote programs which enhance local, state, and regional economic development efforts.

- Develop and deliver high-quality, customized training programs for the professional development of employees of federal laboratories, universities, industry and trade associations, and state and local groups involved in manufacturing modernization, technology transfer, and economic development.