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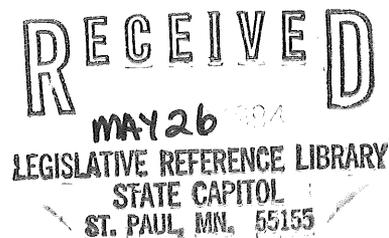


PRELIMINARY FIRST REPORT OF THE MINNESOTA STATE BOARD OF INVENTION
TO THE
OFFICE OF THE GOVERNOR AND THE MINNESOTA LEGISLATURE

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January 31, 1994

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PROLOGUE

Toward Minventia; Its Moral Imperative and Vision

Invention and innovation have been and continue to be remarkably significant but curiously unsung contributors to the state's economic and social development. For example, for countless years, state/national/international commercial inventions/innovations have played a major role in creating: (a) individual and family wealth, power and influence; (b) private sector capital and corporate success/prestige, e.g., 3M, Honeywell Inc.; c) family, independent, corporate and community foundation resources; (d) tax revenues for municipal, county, state and Federal governments; and (e) a higher quality of life for the general citizenry.

Yet never before has such human productivity done so much for so long for so many beneficiaries with so little reciprocal recognition and financial support. It is morally long overdue and practically most timely to correct that historic oversight. In the interests of all Minnesotans and beyond, we now must institutionalize and thus more systematically support invention and innovation to strengthen and ensure its rightful place in our society. Then we can better organize proper action to encourage, nurture, replenish, mine, harness and target one of the demonstrated major sources of Minnesota's past, present as well as its likely future continuous self-renewal, to the state's considerable national and global advantage.

Excerpt from
Toward Minnesota As The Global Invention/Innovation Center

by

Daniel A. Ferber, Council Member
Founding Chairman and CEO

Institute for Invention and Innovation (3I)
for

The Governor's Council on Entrepreneurship and Innovation
November 1, 1984

I. Spirit, Philosophy and Vision Toward Minnesota as the Global Invention Capitol (Minventia)

The increasing national level of negativism and cynicism combined with the decreasing level of optimism and hope require new initiatives to combat the former and rekindle the latter. To that end, almost twenty years after celebrating its Bicentennial, the United States needs a unifying vision so that a new Spirit of '76 can be invented, inculcated and implemented by its citizenry.

One emerging vision is based upon the philosophical assumption that the human condition is at its best when its yet underutilized and underestimated inventive capability is encouraged, nurtured, rewarded, mined, harnessed and then focused upon solving significant socio/economic problems. The stimulation of that now-now-relatively dormant human asset thus calls for reinforcing cultural values, social policies and incentive systems. When they are in place, a quantum increase in such an inventive, constructive expression of individual/community self-fulfillment and self-renewal are much more likely to occur. Such citizen attitude and behavior would be a refreshing alternative indeed to the current and seemingly excessive, destructive criticism which abounds.

It is in this context that Minnesota, acting a second time as a voluntary national laboratory (Inventive Federalism, Appendix A), is developing a comprehensive, integrated invention/innovation support/marketing system, a nationally-replicable infrastructure toward a prototype model of an "inventive society" (Minventia, Appendix B). And Minventia's conceptual vision required the evolution and creation of two basic organizational structures: (a) the Minnesota State Board of Invention, an integrated but intramural companion to (b) the earlier but internationally-oriented Institute for Invention/Innovation (3I).

II. Evolution of the Minnesota State Board of Invention:

One of two basic structural components of a Comprehensive, Integrated Invention/Innovation Support and Marketing System, the Infrastructure of Minventia

General Goal: To organize Minnesota (via the Minnesota Board of Invention and the Institute for Invention and Innovation) over the next ten years as the global invention capitol (Minventia) in the state's enlightened self-interest. Part of the competitive theory strategic rationale behind Minventia initiative is reflected in John Brandl's article "Winning Through Innovation" (Appendix C).

Historic Building Blocks in the Evolution of the Minventia Project

Note: The fifteen year "sole source" effort which both preceded and prompted the following 1985 and subsequent invention legislation will not be documented in this preliminary report but relevant, selected excerpts will be included in the final report.

- (a) 1971. The Commission on Minnesota's Future was imported from Hawaii and modified to create the necessary social climate;:
- to focus on long term as well as short term problems and opportunities. The biennial legislative Horizons program is the ongoing expression of that earlier Commission;
 - to suggest that Minnesota better organize itself to invent solutions systematically for such problems and opportunities, i.e., a continuous self-renewal strategy for the state, thereby permitting Minnesota to invent far more of its future than had heretofore been considered possible.
- (b) 1975. The requisite first phase of the Minventia project, inter-generational education/lifelong learning, was strongly endorsed as an official project of the Minnesota American Revolution Bicentennial Commission, chaired by then-Lt. Governor Perpich.
- (c) 1984 The Governor's Council on Entrepreneurship and Innovation, chaired by Carol Pine, including then-Representative Phil Riveness and now-Senator Tracy Beckman, recommended to Governor Perpich the early elements of "a comprehensive, integrated invention and innovation support and marketing system", the infrastructure of Minventia, and an appropriation of \$811,500 for its implementation.
- (d) 1985 and 1986. The first public policy "invention" legislation in Minnesota's history was introduced (S.F. 876 and H.F. 976). The initial focus was on services primarily for independent inventors toward a much more comprehensive, integrated and authentically state invention and innovation support and marketing system. That legislation passed out of the Economic Development and Commerce Committees in both houses, in both years, with a recommended appropriation of \$958,500. See also the 1987 and 1988 successor bills (H.F. 1380 and S.F. 468), 1989 and 1990 (H.F. 2720 and S.F. 2303) and those of 1991 and 1992 (S.F. 307 and H.F. 464).
- (e) 1987. A \$100,000 state appropriation and implementing contract was awarded, via DTED, to the "sole source" Institute for Invention and Innovation (3I):

"for the study and design of a comprehensive, integrated invention and innovation support and marketing system. The study must examine the feasibility of locating an invention and innovation center in the Twin Cities metropolitan area, with a statewide network involving Twin Cities' suburban and greater Minnesota communities. The design must include an educational component to encourage greater interest in innovative and inventive methods. It must also provide proposals for linking Minnesota-based invention and innovation activities with similar efforts occurring nationally and internationally." 1988 Minnesota Laws, Chapter 686, Article

1. Section 14(h).

The results of the study (DTED submitted multiple copies of its final report and all research materials to the Legislative Library and designated legislative committee chairs) clearly demonstrated the need and desire for a much more advanced, "comprehensive, integrated invention and innovation support and marketing system" with a Minnesota Board of Invention as the recommended vehicle, as expressed in S. F. 307 and H.F. 464 (see above).

- (f) 1993. It remained for the 1993 legislature finally ,via S.F. 489 and H.F. 1177, to establish the Minnesota Board of Invention (Appendix D).

Summary

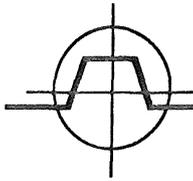
An orderly, twenty year process of "living out," studying and then designing a "comprehensive, integrated invention and innovation support and marketing system" has resulted in the bipartisan 1993 bill originally drafted by Senator Roger Moe. That bill established the Minnesota Board of Invention, with its implicit 10 year plan, to develop and orchestrate the Minventia Project within the state's borders. Simultaneously, the independent Institute for Invention and Innovation (3I) was developing and will provide an integrated, international invention/innovation search without those borders, paralleling a similar Japanese 50 year effort (Appendix E). Hence MBI and 3I comprise the two basic organizational structures which undergird and support the Minventia project.

III. Review of Existing Minnesota Invention/Innovation Activities
(Toward "connecting the dots")

According to subdivision 6 [Report] in its enabling legislation, the Board of Invention's report to the Governor and the legislature "must include a review of invention activities in the state." Such activities have been reviewed as evidenced both (a) in the Board's review of its own activities (see Section V) and (b) in the individually submitted summaries of those activities, listed as follows and attached in the same alphabetical order.

- A. Support services for a new idea and a resultant small company: the Robodyne Corporation case study (Joseph Alvit )
- B. Inventors and Designers Education Association (Bill Baker)
- C. Minnesota Inventors Congress (Penny Becker)
- D. Inventors Club of Minnesota/I T & T Society (Ruth Bernstein)
- E. Minnesota Inventors Hall of Fame/U of M Office of Research/Technology Transfer Administration (Henry Buchwald)

- F. Inventions and inventors: A Nordic Track Inc. case study (Weston Cutter)
- G. Minnesota intellectual property law overview (Phil Goldman)
- H. Small business development center overview (Jack Hawk)
- I. Northwestern Minnesota inventor activities (Steve Levinson)
- J. Revitalizing the inner-cities of Mpls./St. Paul through invention-driven job creation partnerships (Luther Prince)
- K. Precollegiate (grades 4-9) Young Inventors Fair and its educational program components (Janet Robb)
- L. Large corporate R&D Programs: a 3M case study (Patsy Sherman)
- M. Northeastern Minnesota inventor activities (Milt Toratti)



ROBODYNE CORPORATION

Precision Electronic Component Packaging, Handling and Assembly

January 19, 1993

Dan Ferber
49 Inner Drive
St. Paul, MN 55116

Dear Dan,

The ability to create a new idea is universal to all people regardless of race or creed. Ideas for new products or services create jobs, economic prosperity and progress to the community which encourages innovation.

In today's economic environment, it has become increasingly difficult to start a new company with a new idea. The level of administrative paperwork to comply with state and federal laws is complex and expensive.

Having ideas for a new product or service is great, but that great idea or service needs to be managed, funded, produced, marketed, sold, supported after the sale and ultimately accepted by the customer.

Repeat orders is the ultimate achievement to realize the product is good and that it is viable in the market place. There are a few companies which make the new idea easier to reach the market place. Companies such as Teltech and MBDC.

Teltech is a private company which can help an entrepreneur with contacting experts, literature searches and vendor locating at a very low cost and mostly free. (Contact: Joseph Schuster 1-800-367-8358)

As a minority (Hispanic) entrepreneur, valuable assistance was received from MBDC (Minority Business Development Center) which is a U.S Department of Commerce Agency. (Contact: Jim Faricy 612-331-5578) The MBDC helps minority entrepreneurs with basic management and technical assistance at a very low cost.

The above mentioned companies have not only provided valuable services to me at Robodyne Corporation, but also to dozens of other small or mid-sized companies.

Ideas which are encouraged can produce start up companies which can become the 3M or Control Data's of tomorrow.

Best Regards,

Joseph Alvité



Inventors & Designers Education Association, Inc.
P.O. Box 268
Stillwater, MN 55082
612-439-1149

IDEA is a non-profit educational organization helping inventors/innovators by providing the direction and assistance they need in bringing their ideas through the invention process. To help satisfy the various levels of inventors requesting help, IDEA provides a hands-on environment in which they can freely discuss the aspects of prototyping, manufacturing, financing, marketing and distribution of their idea.

IDEA had its beginning in 1989 when a hand full of inventors from the metro Twin City area, met at the Elk River High in search for answers to their questions which weren't being answered through the public service side. After several meetings a trust was quickly established between all participants and by networking together, those difficult meat and potato questions soon had answers they could understand and implement.

In over four years of monthly meetings, hundreds of ideas were shared amongst members. Representatives from industry were invited in to share their manufacturing processes, position and services offered. Idea members built and manned an "idea" booth at the Minnesota State Fair in 1991 & 1992 with over 900 fair-going inventors registering their need for more information and help with their idea.

Day long workshops on 'getting through the invention process' were presented in conjunction with technical colleges and small business development centers throughout Minnesota, western Wisconsin and northern Iowa by IDEA's director and one of its members. A booklet titled 'Evaluating Your Idea' was published and has been acclaimed as the most easily understood piece of educational material compiled for a beginning inventor.

The cost of accomplishing the above, plus additional pieces such as a newsletter, etc., was born by its members and did not exceed \$8,000. All activities, including the secretarial and public relations was done with volunteered time, including that of the director.

Under the "We can't be everything to everybody" category, the needs that IDEA can supply are limited but can be broken into two distinct areas:

- Early Education** on the process of invention (an early sifting of ideas)
 - What to do, when to do it and
 - How to keep from getting ripped-off (even from the good guys)
 - Getting rid of paranoia, documentation, etc.
 - Making sure ideas are *Market Driven* not inventor driven!

Product Development. As a 501-C3, IDEA is education based and not a development company. But success can come from being involved in the pull-through process by incorporating networking with industry.

The Director:

William E. (Bill) Baker
Historic Village Collectibles, Inc.

At a young age of 57, Bill Baker continues to find solutions that make it difficult for entrepreneurs, inventors and innovators to get their product ideas to market.

Coming from a back ground of sales in the building industry and many years of publishing a magazine and tabloid in the same field, Baker founded the Inventors and Designers Education Association in 1989 and has been its director until the fall of 1993.

During the last sixteen months, Baker has started another company whose product line consists of producing miniature lighted ceramic replicas of historic structures throughout the State of Minnesota.

As a small business owner since 1977, Baker has worn most of the many hats it takes to get a small innovative business up and running. As director of I.D.E.A., he has shared much of his experience and expertise with other inventors and innovators through classes held at community and technical colleges around the Midwest during the past several years.

MINNESOTA INVENTORS CONGRESS
Dedicated to the Advancement of Inventors and their Ideas
1030 East Bridge Street - P.O. Box 71, Redwood Falls, Minnesota 56283
507-637-2344



Mission...Historically, the Minnesota Inventors Congress Inc., (MIC) was established in 1958 as a nonprofit volunteer organization to encourage economic development by providing inventors with:

- * A place to exhibit their inventions
- * Access to information about developing, protecting, manufacturing, and marketing of inventors' products

Through the years, the MIC has evolved into an effective support system for inventors in America and around the world. The organization has formalized its mission and defined its goals, continuing to serve inventors through encouragement of invention, provision of information, and general assistance throughout the invention process.

The MIC has consistently focused on the initial purpose of the organization:

- * An annual convention held the second weekend of June in Redwood Falls, Minnesota, to provide a place for exhibiting invented products
- * A year-round business resource for inventors and others interested in the invention development process

Thus, the Minnesota Inventors Congress is both an annual convention and a year-round inventors resource center.

World's Oldest Annual Invention Convention...The convention promotes the spirit of invention and innovation by providing a meeting place for:

- * All inventors, ranging from the experienced with hundreds of patents, to those in the idea stage of the inventive process
- * Manufacturers, marketers, investors, and licensees seeking new products

Each year, the convention presents more than 200 inventions and attracts some 10,000 visitors from nearly every state in the United States as well as foreign countries.

The convention is held the second weekend in June, beginning on Thursday with an inventors' workshop. Topics focus on successful invention management, including licensing and marketing.

Inventor exhibits are open Friday through Sunday, allowing visitors to view the inventions, and inventors to meet other inventors, manufacturers, marketers, investors, patent attorneys, and consultants. The MIC MarketPlace features successful inventions from previous years for sale. The Minnesota Student Inventors Congress, serving grades K-12, is another aspect of the annual convention. Its purpose is to encourage invention and creativity through the educational curricula statewide and the exhibitions.

Other events and activities during the convention include judging of inventions and exhibitor awards ceremonies, Minnesota Inventors Hall of Fame induction ceremony, and various community events for the whole family.

Inventors Resource Center (IRC)...The year-round support system was established with the guidance of an Advisory Council and an appropriation from the Minnesota State Legislature to expand invention-related services and provide ongoing contact with well-known organizations relative to inventors, governmental agencies, funding sources, and patent attorneys to further assist inventors.

Best Available Resource...The Inventors Resource Center serves inventors with:

- * Literature - invention-related publications, pamphlets, videotapes, and reference books
- * Educational seminars and workshops - on the various facets of invention process
- * Referrals - to organization and businesses with expertise in each phase of the invention development process
- * MIC MEMO quarterly educational newsletter - up-to-date information on resources, upcoming events, inventor promotions, and much more
- * Hot Line - for invention-related guidance - 507-637-2344 or 1-800-INVENT-1, within Minnesota
- * Membership - involvement in professional organization supporting invention and innovation

The IRC was formed to make the process easier for inventors and to assist them with such issues as:

- * Sources of capital or grants for product development
- * Patent protection
- * Manufacturing assistance
- * Marketing advise

Success Stories... *"The MIC has provided me with the information and sequence of steps necessary to market an invention such as mine, not only from the Resource Center, but also through people and organizations I have come in contact with because of the MIC",* says Bradley Hibben of Rosemount, MN.

A few examples from the long list of successful inventions receiving assistance through the MIC best illustrate the success of our organization:

- * *Superior FlameFighter* - piercing nozzle system used by fire fighters around the world
- * *Rollite Trailer* - \$3 million idea that was the beginning of the fold-down camper-trailer industry
- * *Quad Cane* - four-pronged cane led to development of rehabilitation equipment company employing 40
- * *Gripper* - device to secure rope without tying a knot - with over 1 million sold internationally
- * *Nada-Chair (Back Sling)* - legless chair for perfect posture and special back support - with annual sales of \$2 million
- * *Performax S/T Sander* - drum sander for do-it-yourself or commercial use - with annual sales over \$2 million
- * *Lock Box Jacket* - protective cover for realtor's lock box -with over 200,000 sold in more than thirty states

Benefits...The Minnesota Inventors Congress benefits many people in many different ways:

- * For the inventor, it provides the opportunity to display his/her invention to the public, obtain product test market, exchange ideas with other inventors, attend educational seminars, and meet one-on-one with patent attorneys, management and marketing professionals, manufacturers, investors, and licensees.
- * For the business community, the MIC provides access to new products, which generate industry and jobs.
- * For the general public, thousands of men, women and children alike have the pleasure of seeing new products at different stages of development and to discuss new ideas with creative and friendly people.

MEMORANDUM

TO: Governor
Legislature

FROM: NordicTrack
Weston Cutter 
Vice President, Product Planning & Development

DATE: January 13, 1994

SUBJECT: Inventions & Inventors

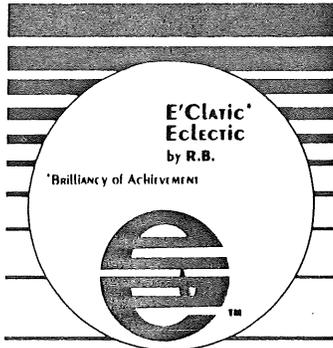
NordicTrack's mission is to be a high-growth, multiproduct, multinational, fitness and wellness company known for quality, excellence, and innovation. As recognized by the Product Development Management Association as corporate innovator of the year, our organization uses no internal inventors and our goals for innovators throughout the nation is for them to submit their inventions to us for evaluation.

The State of Minnesota is already known for its' innovation throughout the country. We have 3M, InterNet gopher program which was developed at the University of Minnesota, and the kids program, "What If?" sponsored by the Science Museum. But, none of these programs works toward general inventors and inventions.

Our goals for promoting private innovators with their creative thoughts would be to:

- Encourage other companies to use private inventors rather than just depending on their internal research & development departments through corporate tax incentives.
- Focus on a positive business climate. For example - by addressing the workmen's compensation issue.
- Change the tax laws and allow patent application fees to be tax deductible for the private inventor.
- Set up a fund by either a government agency or the private sector to provide for the up-front moneys needed to apply for patenting an invention and assisting the inventor such as a fellowship, scholarship, etc.
- A coordinated effort through all extension programs for establishing more inventor supports throughout the State of Minnesota.

We want to continue to have ground breaking opportunities for private inventors in order to keep the State of Minnesota innovative, creative, and providing quality and excellence to the marketplace.



To: The Minnesota Board of Invention

From: Ruth Bernstein

Subject: Activities of the Inventors Technology and Transfer Society

Gentlemen:

The Inventors and Technology Transfer Society (ITTS) is a non-profit corporation, registered in the state of Minnesota. It's governing board of about 25 members believe that "Inventions Improve the Quality of Life for All Society." Therefore they work at fostering inventions through education. The mission statement is "Provide resources and expertise to further the education, progress, and goal establishment of inventors and innovators, and to stimulate and encourage the innovative process.

The society is authorized to use "Inventors Club of Minnesota" as its name and operates a club, ICM, of about 80 members that meets on the third Tuesday of each month at Dunwoody Institute in Minneapolis. The topics are planned to give an inventor a comprehensive education over a period of about two years. Typical topics are: patenting, marketing, finance, prototypes, technical help, licensing, tradeshow, and exhibits. These topics are emphasized with success stories and the overall methods used as told by inventors who have been successful at a variety of levels.

ITTS has also held meetings on Technology Transfer, aimed at transferring corporate technology to independent inventors.

ITTS actively encourages young inventors through its cooperation with the Educational Cooperative Service Unit (ECSU). It assigns a member to the Metro ECSU Advisory Board and the Inventors Resource Center Advisory Board in Redwood Falls.

ITTS has presented workshops at the Minnesota Inventors Congress (MIC) and has several members who are Associate Directors of MIC.

Respectfully,

Ruth Bernstein

MINNESOTA BOARD OF INVENTION

University of Minnesota Technology Transfer/Minnesota Inventors Hall of Fame

Henry Buchwald, M.D., Ph.D.

I represent the efforts in technology transfer of the University of Minnesota. There are myriads of inventors and innovators at the University interested in applied science. They are on the faculties of the Medical School, the Institute of Technology, the School of Dentistry, the School of Agriculture, and many other University schools and research centers. In turn, these members of the faculty are ably represented by the Office of Research and Technology Transfer Administration (ORTTA) under the supervision of Mr. Tony Potami.

The University of Minnesota has an outstanding tradition of research leading to practical application. Examples include the seminal ideas for the taconite process, mass spectrometry, heart valves, cardiac pacemakers, implantable infusion pumps, the flight recorder, a personal rapid transit system, new crops and forest products, transgenic fish, and dog head collars. The University of Minnesota ranks sixth nation-wide in the number of patents issued to universities. Currently, 161 inventions have been licensed to 179 companies by ORTTA. The impact of these activities on industry, jobs, and the economy of the state, as well as the health and quality of life of the nation, can modestly be stated to be substantial.

My own contributions have been in lipid/atherosclerosis research, wherein I serve as the Principal Investigator for the Program on the Surgical Control of the Hyperlipidemias (POSCH) trial. To-date, POSCH has been the most definitive study to demonstrate that the marked reduction of cholesterol and LDL-cholesterol is associated with a decrease in heart attacks and other cardiovascular events, improvement in the appearance of coronary vessels on arteriography, and a predictable increase in life expectancy. In technology transfer, my research associates and I invented the first implantable infusion pump (and now a new concept successor), the prototype for all implantable ports, non-clotting catheters, and an articular joint access device.

On the Board of Invention, I also represent the Minnesota Inventors Hall of Fame, which elected its first inductee in 1976 -- Mr. Willis Gille, the inventor of the electronic automatic pilot for aircraft. Subsequent honorees have included representatives from numerous companies in Minnesota, the University of Minnesota, and independent inventors of our state. I was elected to membership in 1988. I subsequently served as the President, and currently serve as the Chairman of the Board, of this organization. The primary goal of the Minnesota Inventors Hall of Fame coincides with that of the Board of Invention; namely, to appreciate innovation.

*MINNESOTA BOARD OF INVENTION
PHILIP M. GOLDMAN
FREDRIKSON & BYRON, P.A.*

As a patent attorney with many years of experience within the State of Minnesota, one of my roles on the Board of Invention will be to serve as a voice of attorneys involved in the processes of invention and innovation. There are a number of groups and associations, with summaries of some provided below, that could serve as useful networking vehicles between the Board and the legal community.

It is my belief that innovation need not end with the inventor. In other words, the process of taking an idea from the stage of conception to commercialization must involve attorneys, and others, who are willing to think and contribute in a manner that is as creative as the inventor's own. The concerns of attorneys involved in this process are similar in many respects to those of inventors, including to uncover and end sham invention services, and to find matches between those with inventions and those with the means to commercialize them.

My activities with the following groups will help to begin the necessary dialogue between the Board and the legal community.

*MINNESOTA INTELLECTUAL PROPERTY LAW ASSOCIATION
(612) 333-1183 (MN State Bar Assn)*

Recently affiliated with the MN State Bar Association and comprised of about 250 attorneys and agents throughout the state of Minnesota working in the areas of patents, trademarks, and copyrights. Committees include: Public Relations, Continuing Legal Education, Small Business Committee, Biotechnology Law, Software Protection

*AMERICAN INTELLECTUAL PROPERTY LAW ASSOCIATION
(703) 415-0780
Arlington, VA*

National organization of intellectual property lawyers, involved in public education, lobbying, continuing education, and fostering interactions with the Patent and Trademark Office.

*ASSOCIATION OF UNIVERSITY TECHNOLOGY MANAGERS
(203) 852-7168*

Founded in 1974 as an association of administrators of academic institutions who are responsible for protecting and commercializing technologies arising in those institutions. Membership has now increased to over 600, including professionals from industry, law, government as well as academia. Publishes the "AUTM Journal" exploring multi-disciplinary scientific, business, academic, and legal aspects of technology transfer.

LICENSING EXECUTIVES SOCIETY

(216) 771-2600
Cleveland, Ohio

Worldwide federation of business-oriented professional societies of individuals involved in the transfer of technology and industrial or intellectual property rights. Publishes "*les Nouvelles*", a journal of perspectives and information relating to licensing in various countries around the world, and on a global basis.

OTHERS

AMERICAN BAR ASSOCIATION - PATENT AND TRADEMARK SECTION
ASSOCIATION OF CORPORATE PATENT COUNSEL
NATIONAL INVENTORS HALL OF FAME
INTERNATIONAL TRADEMARK ASSOCIATION

237781

**Facts About Southwest State University
Small Business Development Center**



Southwest State University
Marshall, MN 56258
TELE: (507)-537-7386
FAX: (507)-537-6094

What Are Small Business Development Centers?

Small Business Development Centers Provide counseling, training, information, referral, technology transfer and other assistance to small business owners and managers. Services are provided at convenient locations throughout Minnesota.

What Can I Expect From a Small Business Development Center?

When you call or make an appointment with a Small Business Development Center, trained staff will answer your questions, help diagnose your problem, refer you to a qualified counselor or pertinent training program, or directly provide the service you need.

What Are Examples of Small Business Development Center Services?

Small Business Development Centers can provide assistance in most areas of business management and operations, including budgeting, cash flow analysis, pricing, financing, marketing and market planning, personnel management, production issues, quality control, scheduling and technology transfer. Small Business Development Centers also can provide specialized services in areas like government procurement, export, hazardous waste management, invention and innovation, and Small Business Innovation Research. Resource libraries at Small Business Development Centers offer access to business books and periodicals and to computerized data bases. Many Small Business Development Centers also have microcomputers and business software that may be used by clients to develop business plans and make financial projections.

What Does It Cost to Use a Small Business Development Center?

Business counseling and many other services are provided at no charge. A fee may be charged for seminars, workshops, and specialized services like loan packaging, access to computerized data bases, and customized marketing programs.

Who Provides Business Counseling at Small Business Development Centers?

Counseling services will be provided by Small Business Development Center staff or professional consultants. You will be matched with a counselor who best suits your needs.

Do Small Business Development Centers Have Special Emphasis Programs?

Specialized programs give attention to the needs of minority, veteran, disadvantaged and women business owners. Arrangements for handicapped individuals who wish to attend training programs may be made by contacting the training program sponsor.

Contact the Southwest State University SBDC at 507-537-7386 with any questions you may have.

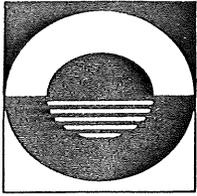
NORTHWESTERN MINNESOTA INVENTION-PROMOTION/SUPPORT ACTIVITIES
Steve Levinson, Ph.D.

Assumptions that guide invention promotion/support activities in Northwestern Minnesota include:

1. Invention support/promotion is a viable, farsighted and cost-effective rural economic development strategy.
2. Rural communities can increase the number of successful homegrown inventions by taking measures to both increase the "birth rate" (i.e., stimulate inventing) and decrease the "infant mortality rate" (i.e., increase the survivability) of homegrown inventions.
3. It's not enough to have formal programs that require inventors to "apply" for services. There is a strong need for less formal, community-based efforts (and attitude) that actively promote, seek out and embrace homegrown inventions and take initiative in encouraging/helping inventors to effectively pursue their ideas.
4. A CAN-DO attitude on the part of individuals and communities will lead to more homegrown inventions and greater success in commercializing them. We can deliberately influence individuals and communities to adopt such an attitude by continually exposing them to inspiring real life stories that dramatically illustrate what other similar individuals and communities have accomplished.

CURRENT AND PLANNED ACTIVITIES:

1. Operation Earmuff: 1992 recipient of the National Association of Development Organizations' Innovation Award for creative, far-sighted approach to economic development, Operation Earmuff is a flexible, school-based program designed to inspire and teach children to invent.
2. IdeaNet: Community-based *unprogram* designed to promote commercialization of homegrown ideas by equipping community leaders to provide effective guidance, encouragement and sustained emotional support to local inventors/infant-stage projects.
3. Projects in the discussion/planning stage:
 - ▶ A sustained media-based effort to use locally-relevant "They Said It Couldn't Be Done"-type invention/innovation success stories to influence individuals/communities to adopt and maintain an invention/innovation-engendering CAN-DO attitude.
 - ▶ A confidential clearinghouse to connect local inventors/infant-stage projects with local entrepreneurs/prospective investors.



M' Power
INCORPORATED

3041 Fourth Avenue South • Minneapolis, Minnesota 55408 • (612) 822-1628 • FAX (612) 822-2507

**REVITALIZING THE INNER-CITIES OF MINNEAPOLIS
AND ST. PAUL THROUGH INVENTION-DRIVEN JOB
CREATION PARTNERSHIPS**

by

Luther T. Prince

SUMMARY

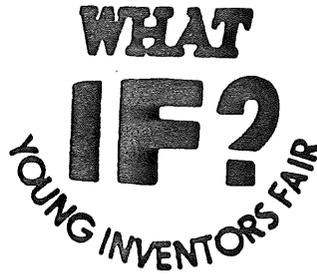
THE CONTINUING DECAY OF THE INNER-CITIES OF MINNEAPOLIS AND ST PAUL PRESENTS COMPLEX PROBLEMS THAT ARE HAVING AN ADVERSE IMPACT ON THE QUALITY OF LIFE AND THE ECONOMIC COMPETITIVENESS OF THE ENTIRE METROPOLITAN REGION. IF THIS TREND CONTINUES, THE VITALITY OF JOB PRODUCING CORPORATIONS WILL SUFFER AS THE COMPETITIVENESS OF THIS REGION DECLINES AND THE SKILL LEVELS OF THE EMERGING WORKFORCE REMAIN UNDEVELOPED.

ONE OF THE MOST EFFECTIVE WAYS TO ADDRESS THESE PROBLEMS IS TO CREATE GOOD PAYING JOBS FOR INNER CITY RESIDENTS WITHIN THEIR NEIGHBORHOODS. EFFECTIVE JOB CREATION IN A NEIGHBORHOOD INEVITABLY MOTIVATES RESIDENTS TO ADDRESS OTHER ISSUES SUCH AS EDUCATION, CRIME, HOUSING AND FAMILY VALUES, THEREBY REDUCING THE COSTS OF SOCIAL PROGRAMS AND INCARCERATION PAID FOR BY TAXPAYERS. AN ADDED BENEFIT OF INNER-CITY JOB CREATION IS THE POSITIVE IMPACT ON CHILDREN THAT WOULD RESULT FROM THEIR ENCOUNTERS WITH WORKING PEOPLE IN THEIR OWN NEIGHBORHOOD

MANY APPROACHES TO JOB DEVELOPMENT HAVE BEEN TRIED THROUGH THE YEARS WITH MIXED DEGREES OF SUCCESS; HOWEVER A COMMON BUT FLAWED ASSUMPTION IS THAT LIVING WAGE JOBS ARE AVAILABLE IN THE SUBURBS FOR INNER-CITY RESIDENTS WHO ARE TRAINED, HAVE A GOOD WORK ETHIC, AND HAVE ACCESS TO TRANSPORTATION. REVERSE COMMUTING, IN GENERAL, HAS NOT BEEN SUCCESSFUL. ANOTHER QUESTIONABLE ASSUMPTION IS THAT EXISTING COMPANIES, THAT WILL PROVIDE LIVING WAGE JOBS FOR INNER-CITY RESIDENTS, ARE WAITING TO MOVE INTO OUR INNER-CITIES AS SOON AS SUFFICIENT INCENTIVES BECOME AVAILABLE.

THE PREMISE OF THIS PROPOSED INITIATIVE IS THAT, DUE TO THE STATE OF OUR NATIONAL ECONOMY, MOST JOBS FOR INNER-CITY RESIDENTS MUST BE CREATED. THIS WILL REQUIRE AN INNOVATIVE STRATEGY INVOLVING BETTER INVENTION MANAGEMENT AND EFFECTIVE PARTNERSHIPING. A KEY ELEMENT IN THIS APPROACH TO JOB CREATION IS THE COMMITTED INVOLVEMENT OF CORPORATIONS DEDICATED TO CONTINUING INNOVATION.

THESE CORPORATIONS CAN PLAY A UNIQUE ROLE BY BECOMING INVOLVED IN JOINT VENTURES THAT CREATE NEW BUSINESSES BY PROVIDING INTERNALLY DEVELOPED PRODUCTS, INVENTIONS AND/OR TECHNOLOGIES THAT ARE NOT BEING EFFECTIVELY UTILIZED. TECHNOLOGY AND PRODUCT TRANSFERS FOR THESE NEW JOINT VENTURES WOULD NOT ONLY PROVIDE CORPORATIONS THE OPPORTUNITY TO CONTRIBUTE TO THE SOLUTION OF A SERIOUS SOCIAL PROBLEM BUT ALSO OFFER THEM THE OPPORTUNITY TO ACHIEVE A REASONABLE RETURN ON AN UNDERUTILIZED ASSET. STRONG JOB DEVELOPMENT PARTNERSHIPS BETWEEN LARGE CORPORATIONS, ENTREPRENEURS, COMMUNITY DEVELOPMENT ORGANIZATIONS, PUBLIC AGENCIES, AND NON-PROFIT CORPORATIONS CAN HAVE A SIGNIFICANTLY FAVORABLE IMPACT ON ANY ECONOMIC DEVELOPMENT INITIATIVE DIRECTED AT INNER-CITY REVITALIZATION. STATE GOVERNMENT CAN PLAY A UNIQUE ROLE IN SUCH AN INITIATIVE BY ENCOURAGING BETTER UTILIZATION OF INVENTIONS.



FOURTEEN YEARS OF INVENTING

The Young Inventors Fair: A year-long program offered in the Twin Cities metro area to students in grades 4-9. The program consists of several coordinated, interrelated workshops and events which teach and encourage students to invent. Inventing is taught as a vehicle for expressing creativity which is both satisfying to the student and beneficial to society. Each year the program culminates in a display of student inventions, the Young Inventors Fair, which is open to the public.

The program is coordinated by the Metro Educational Cooperative Service Unit (Metro ECSU). Cosponsors of the program are the Minnesota Council of the Gifted and Talented (MCGT), the Metro Educators of the Gifted and Talented (MEGT), and the Science Museum of Minnesota (SMM). An Advisory Committee meets during the school year to plan and implement the Young Inventors Program and Fair.

Program Goals

1. To teach and encourage students to use creative problem-solving techniques.
2. To teach and encourage students to bring creative ideas to reality.
3. To provide an affective structure which helps students build positive self-images.

Program Components

Teacher Workshops - Workshops for teachers new to inventing and for those continuing to teach inventing are offered in the fall to provide instruction about the inventing process, how to include inventing in the curriculum, and the Young Inventors Fair. Funding for two hundred teachers to be trained is provided by the Medtronic Foundation for the 1993-94 school year.

Student Classes - Student classes are presented by professional inventors and educators to introduce students to the inventing process. Students are taught to view inventing as creative problem-solving.

Evaluating - Volunteer evaluators who are inventors, engineers, teachers, artists, and parents are trained to evaluate student inventions according to the following criteria:

- Problem statement
- Identification of need
- Quality of research
- Originality
- Evidence that the invention will work
- Invention design/artistry

During the past several years over 750 screened and/or locally judged entries have been submitted each year for consideration. The 100 inventions with the highest cumulative

scores are selected to be exhibited at the Young Inventors Fair. All students are recognized for their participation, even if their invention is not chosen to be exhibited at the Fair.

Young Inventors Fair - The Fair is held in March or April at the Science Museum of Minnesota and is free to the public.

Student Participation

Eligibility

The program is intended for creatively gifted 4th through 9th graders in the seven-county Metropolitan area. To participate a student must attend school in a district that is a member of Metro ECSU and pay an application fee.

Application For Entry

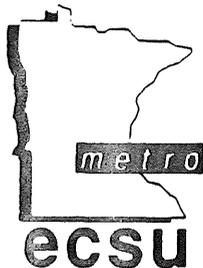
Students who desire to exhibit their invention at the regional Young Inventors Fair on April 9, 1994 are to send a completed entry form to their district contact person. The contact person will screen the entries for completeness and forward them with the entry fee to Janet Robb at ECSU by the first Wednesday in February. Students will receive written notification by the middle of March if their invention will be exhibited.

The Medtronic Foundation will provide a number of student entry fee scholarships for students of color or economically disadvantaged youth during the 1993-94 school year.

Further Information

Contact the Metro ECSU Gifted Center, 490-0058, extension 107, for further information.

YOUNG INVENTORS FAIR XIV
SATURDAY, APRIL 9, 1994
NOON - 3:00 P.M.
SCIENCE MUSEUM OF MINNESOTA, ST. PAUL



**Educational Cooperative Service Unit
of the Metropolitan Twin Cities Area**

3499 Lexington Avenue N.
Saint Paul, Minnesota 55126-8017
(612) 490-0058 • FAX (612) 490-1920

3M has a long-standing reputation for invention and innovation. There are many factors that contribute to this success, some of which are described herein.

A history of successful product developments, many from serendipitous discoveries, has produced a tolerant management attitude and a culture that expects new products. Management personnel generally come from internal promotion and are trained to develop attitudes and practices that encourage individual initiative.

Technical personnel are encouraged to spend up to 15% of their time working on ideas they have which are unrelated to their current assignments. Also encouraged are small close teams of technical personnel and sales and marketing personnel. In many divisions this is particularly facilitated by colocating these personnel in the same building so that informal contacts occur frequently.

The majority of technical and marketing personnel are located at one of the two major headquarters of the company - the 3M Center in St. Paul, MN or the Austin, TX facility. This closeness produces numerous benefits. Employees frequently ride to work together in car or van pools. Personnel also attend on-site seminars, programs and classes together. Shared recreation occurs at the 3M Tartan Park recreational complex and through various special interest groups sponsored by the 3M Club. All of these interactions provide opportunities for formal and informal transfer and sharing of ideas as well as facilitating the connection with appropriate people to help in solving a problem or bringing a product to market.

One other organization that facilitates technology transfer and idea-sharing is the company-supported but employee-run Technical Forum. This 3M innovation was started over 40 years ago by technical employees to facilitate the exchange of information between laboratory and upper management personnel. Many other companies have since started similar organizations. The 3M Tech Forum has grown to an organization of many special interest chapters and committees. The chapters, as well as the Tech Forum itself, sponsor numerous seminars, classes and special events which serve not only to inform but to bring technical personnel together.

These factors, along with various recognition and reward programs, have helped to contribute to the ongoing introduction of new and successful products.

Northeastern Minnesota (Arrowhead Region)

The following is a synopsis of the activities that occur in northeastern Minnesota to help support innovation, inventors, entrepreneurs in the commercialization process for new technology and products. Specific data can be gathered from the respective organizations.

- I. UMD Center for Economic Development fosters innovation, business formation and economic growth with competent, timely, and accurate technical assistance.
 - Minnesota Technology Regional Offices –Virginia and Duluth.
 - Small Business Development Centers–Duluth, Virginia, Hibbing, Grand Rapids and International Falls.
 - Bureau of Business and Economic Research –Duluth.

- II. Minnesota Technology Inc., Regional Offices in Virginia and Duluth.
 - Evaluate ideas and inventions (upwards of 150 annually)
 - Prototype development assistance and alliance assistance with manufacturers, academia, research institutes, etc.
 - Assist with product and business development for new technologies and products.
 - Member of National Technology Transfer Society.
 - Biannually sponsor the Inventors Workshop in northeastern Minnesota.
 - Assist start-up and expansion of technology-based enterprises with partnership facilitation and sources of capital.
 - Arrowhead Technology Fund developed for regional product development funding assistance to inventors and entrepreneurs.
 - Listed nationally as a Minnesota resource for inventors assistance programs.
 - Library of technical information for inventors and entrepreneurs.

- III. Host and sponsor of the Department of Energy, "National Innovation Workshop" on Sept., 8–10, 1994 in Duluth. Target audience of 400 attendees with publicity in Minnesota, Wisconsin, Upper Michigan, North Dakota, South Dakota, and Canada.

- IV. American Economic Development Council certification of the "Technology Based Economic Development" course held May 23–25, 1994, Duluth.

- V. Support for the Minnesota State Student Inventors Program.

- VI. MTI Regional Office in Virginia has been very successful in assisting the product commercialization process for several new technologies to reach the market place with complete business, financial, technical, and product development assistance. (Details of these success stories are available upon request).

IV. Review of Minnesota Board of Invention Activities

According to subdivision 6 [Report] in its enabling legislation the Board of Invention must include in that its report "a review of the Board's activities. Those activities are best described in/by its agendas which follow for the three meetings to date. The board will hold its fourth meeting on February 18, 1994, the agenda for which will be included in the final version of this report.

But that meeting will complete the review of invention activities in the state, miscellaneous proposals to fill gaps in the invention support system/Minventia infrastructure derived from earlier studies/reports etc., social inventions, ongoing funding initiatives, 1994 legislative proposals, and possible officer elections, all of which will be included in the final report to be completed no later than March 1, 1994.

It should be noted that the Board of Invention has no funding as of yet. Hence there can be no "listing of grants made under the invention grant program. Nor in its brief four month lifespan has the Board been able to do "an evaluation of invention activities," especially without budget or staff. The Board, however, will list possible "recommendations concerning state support of invention activities" which it may place before the Governor and the 1995 legislative session. Those possible recommendations also will be included in Section V of the final report (see Table of Contents).

- V. Proposals to be considered by the Board of Invention as possible recommendations to the Governor and the 1995 Legislature Awaiting presentation and discussion at the 12:00-2:00 p.m., February 18, 1994 meeting at the Robodyne Corporation offices.

DATE: November 15, 1993

TO: MINNESOTA BOARD OF INVENTION MEMBERS/ALTERNATES

FROM: Dan Ferber, ^{D.F.} Convener

SUBJECT: KICK-OFF MEETING, 8:00-10:00 a.m., WEDNESDAY, NOVEMBER 24, 1993, ROOM 125, STATE CAPITOL BUILDING, ST. PAUL, MN

I hope you all can make the above meeting designed to get us acquainted with one another, briefed and underway. Required election of officers (only a chairperson, vice chairperson and secretary are needed initially) should occur at a subsequent meeting before January 31, 1994 (as legislatively required). If there is no objection, I'll volunteer simply as convener to organize mailings/meetings until those elections occur.

Enclosed with this first meeting announcement are:

1. biographical statements for those members/alternates who submitted them as requested prior to this mailing;
2. members/alternates mailing addresses and telephone numbers as prepared by Ms. Cheryl Talberg, Deputy Director of Appointments, Office of the Governor. Please correct possible errors/omissions at our first meeting.

The agenda for the meeting will include: (a) greetings/remarks, Curt Johnson, Deputy Chief of Staff, Office of the Governor; (b) the social philosophy and state/national strategy behind the Board's creation; (c) review of language establishing the Board with 1994 legislative implications; (d) introduction to both the (artist-driven) State Arts Board (1976), from which the enabling language of the Board of Invention was derived, and (market-driven) Minnesota Project Innovation (1983)-both suggestive and successful (legislatively-enacted) operational models; and (e) miscellaneous housekeeping announcements/comments/questions.

For those of you who have not yet visited the Capitol, let alone Room 125, simply: (1) go up the main steps to the Capitol (south entrance-which faces the Cathedral); (2) go in any of the large doors at the top and (3) then "bear right" to the first room on your right, i.e., 125. Parking: You may park at any uncovered meter on the street just in front of the preceding entrance @ one quarter for each 37+ min. If no meter remains, use the larger area/lot just north of and immediately adjacent to the State Office Bldg.-the bldg. just west and across the street from the Capitol. In this lot, put quarters into a designated machine (note its specific instructions). So do bring plenty of quarters! No meeting food or beverages will be available; so "breakfast" before you arrive.

I look forward to meeting you all and to launching what could become a most important Minnesota/U.S. initiative.

BOARD OF INVENTION

FIRST DISTRICT:

Vacant

SECOND DISTRICT:

Members:

Penny Becker
P.O. Box 71
Redwood Falls, MN 56283
507-637-2344 (W)
507-637-2842 (H)

Alternates:

John "Jack " Hawk
840 10th Street
Granite Falls, MN
507-537-7386 (W)
612-564-3347 (H)

THIRD DISTRICT:

Patsy Sherman
9300 11th Avenue S
Bloomington, MN 55420
612-888-2231 (H)

Kristian Dahl
4513 Willow Oak Lane
Minnetonka, MN 55343
612-933-5126 (W)
612-672-0730 (H)

FOURTH DISTRICT

Janet Robb
1754 West Millroad Avenue
Roseville, MN 55113
612-490-0058 ext 107 (W)
612-631-8170 (H)

Weston Cutter
1169 Veronica Lane
Mendota Heights, MN 55118
612-368-2777
612-452-4183

FIFTH DISTRICT

Henry Buchwald
6808 Margaret's Lane
Edina, MN 55435
612-625-8446 (W)

Russ Rooney
1000 Mildred Drive
Richfield, MN 55423
612-869-8625

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Fridley, MN 55432
612-784-6612

William Baker
508 Edgewood Avenue
Stillwater, MN 55082
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612-439-8517 (H)

SEVENTH DISTRICT

Steven Levinson
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Newfolden, MN 56738
218-681-4240 (W)
218-449-3975 (H)

Juan Diaz
2004 Pleasant Avenue
St. Cloud, MN 56303
612-255-2010 (W)
612-251-6765 (H)

EIGHTH DISTRICT

Milton Toratti
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Virginia, MN 55792
218-741-4241 (W)
218-229-3882 (H)

Jerry Beaudette
P.O. Box 43
International Falls, MN 56649
218-286-5773

AT LARGE

Philip Goldman
1926 South Lane
Mendota Heights, MN 55118
612-347-7088 (W)
612-688-8628 (H)

Luther Prince
3521 West 24th Street
Minneapolis, MN 55416
612-822-1628

Daniel Ferber
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St. Paul, MN 55116
612-698-6318

Ruth Bernstein
3320 Louisiana Avenue
#202
St. Louis Park, MN 55426
612-933-8911

Joseph Alvite
353 Aspen Road NE
Wyoming, MN 55418
612-789-5277 (W)
612-464-6080 (H)

Barry Thompson
6258 Fernbrook Lane N
Maple Grove, MN 55311
612-557-1143 (W)
612-559-2748 (H)

Joseph Alvité.

President, Chief Executive Officer and Director of ROBODYNE Corporation,

Mr. Alvité is the founder of ROBODYNE Corporation, and has served as President, Chief Executive Officer and Chairman of the Board since the company's reorganization in February of 1990. Mr. Alvité has 20 years of manufacturing, management and robotics experience, The most recent experience prior to Robodyne was as a consultant with CIMFLEX/Ford Motor Company on a large-scale electronics assembly system.

His work in nuclear remote control, robotics and industrial automation has included contracts with some of the largest, most advanced manufacturing facilities in the United States, including General Motors, Litton, RCA, Northrop, Grumman, Corning Glass, and many others.

He is the founder and past president of Mecanotron Corporation of Roseville, Minn. Mecanotron Corporation manufactures robotic end-of-arm tooling, grippers, and other robotic peripherals.

Mr. Alvité was manager of robotic applications for GCA/PAR Systems, a robot manufacturer and remote control systems manufacturer for the nuclear power industry. While at GCA, Mr. Alvité developed products which led to \$40 million growth in 3 years. Mr. Alvité was also manager of manufacturing for Otec, Inc. of St. Paul, Minn., a manufacturer of automated industrial lifecycle-testing equipment. Mr. Alvité was educated in Cerdan Puebla, Mexico He has a degree in Industrial Arts from Centro Escolar president Francisco I Madero Mr. Alvité holds numerous patents related to robotics and sensors in the U.S., Canada, United Kingdom, and West Germany. He is also an internationally recognized authority in the field of robotics as well as a nationally-recognized speaker for SME, Society of Manufacturing Engineers. Mr. Alvité is also a Teltech expert, a nationally recognized expert organization. Mr. Alvité has been published at the international level and has collaborated with 250 top international experts in the automation and robotics field to write the *International Encyclopedia of Robotics*, published by John Wiley & Sons.

William E. (Bill) Baker
Historic Village Collectibles, Inc.
324 S. Main St., P.O. Box 268
Stillwater, MN 55082
612-439-1149

At a young age of 57, Bill Baker continues to find solutions that make it difficult for entrepreneurs, inventors and innovators to get their product ideas to market.

Coming from a back ground of sales in the building industry and many years of publishing a magazine and tabloid in the same field, Baker founded the Inventors and Designers Education Association in 1989 and has been its director until the fall of 1993.

During the last sixteen months, Baker has started another company whose product line consists of producing miniature lighted ceramic replicas of historic structures throughout the State of Minnesota.

As a small business owner since 1977, Baker has worn most of the many hats it takes to get a small innovative business up and running. As director of I.D.E.A., he has shared much of his experience and expertise with other inventors and innovators through classes held at community and technical colleges around the Midwest during the past several years.

My name is JERRY BEAUDETTE

I reside in International Falls, MN. for the past 12 years.

I lived in Minneapolis all of my life prior to moving here.

I spent about 35 years in the Graphic Arts industry as a sales person for equipment and printing. Installed and instructed offset printing machines.

Was a department head for Gamble Stores for 15 years. Supervised both the printing and display departments.

District Manager for 5 years, covering the five state area for Scriptomatic, Inc. of Philadelphia.

I helped organize the Minneapolis Aqua Jesters for the Minneapolis Star Tribune. They were associated with the Minneapolis Aquatennial as Clowns for the parades. I was also Chief Jester.

I was a director on the Aquatennial Board for 7 years. While on the board I was chairman of the Hospitality Committee for 4 years and was chairman of the Radio and TV committee for 3 years. Was awarded the first outstanding director award one year for Hospitality. Was picked as Town Topper for one week the same year.

Semi-retired to purchase a Resort in Canada. I felt this would be a good way to retire and only work a hundred days a year and travel the other 265 days. BOY! was I wrong. Ran the Resort for two years and then retired in earnest. Sold it at the end of the second year.

All my life I have been a designer and an inventor for items that fill a void where other things end. My latest and most recent invention is trade marked The GRIPPER. It is a rope cleat for securing lines or ropes. Can be used for boat anchors, securing boats to docks, tarp tie-downs and numerous other uses. I have patents and trade marks registered for this product in the U.S. and Canada.

Prior to putting this product on the market for the consuming public, I entered it in the Minnesota Inventors Congress. The South Dakota Inventors Congress and the North Dakota Inventions. I won First Place and the Grand Prize at both the Minnesota and South Dakota Shows and First Place at the North Dakota Invention Show.

At the present time I am on the Board of the Inventors Resource Center. I am a member of the Minnesota Inventors Hall of Fame. Also on the Nominating Committee for Hall of Fame members.

I have been a judge for inventions at the Minnesota Inventors Congress for the past 6 years.



MINNESOTA INVENTORS CONGRESS

A Non-Profit Corporation

507-637-2344

P.O. Box 71
Redwood Falls, Minnesota 56283-0071

1-800-468-3681
(MN only)

BIOGRAPHICAL SKETCH

Penny Becker is the Executive Director of the Minnesota Inventors Congress (MIC). She began in 1980 coordinating the "world's oldest annual invention convention" promoting the spirit of invention and innovation to 10,000 inventors and entrepreneurs the second weekend in June in Redwood Falls, MN.

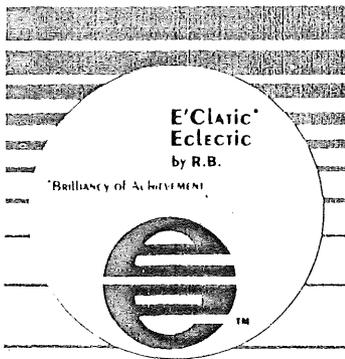
Upon receipt of a legislative appropriation in 1986, Becker used her experience and expertise to expand the non-profit organization to provide year-round inventor services... The Inventors Resource Center was established as an arm of the MIC, to further encourage invention and innovation, and the provision of information, assistance and support at all phases of the innovative process.

As Executive Director of the Minnesota Inventors Congress Becker:

- *organizes and directs an invention-related program via the resource center and convention
- *manages and secures program funding
- *directs the efforts of over 120 volunteers and staff
- *coordinates and presents at seminars and expositions
- *authors articles and performs interviews to promote invention and inventors
- *edits a newsletter to 500 nationwide inventor members/organizations
- *promotes and educates inventors through the Minnesota Student Inventors Congress, and the Minnesota Inventors Hall of Fame
- *supports and promotes reputable invention-related resources
- *encourages invention with professional involvement as volunteer director on: Board of Invention - 1993-current; United Inventors Association of the USA - 1990-current; R.A.D.C. Inventors Assistance Fund - 1989-current; and Minnesota Student Inventors Congress - 1988-current

With over 13 years of experience and serving 22,000 inventors globally, Becker's credo is: Like Thomas Edison, one of the greatest inventors and product promoters, I believe successful inventing is 1% inspiration and 99% perspiration. Inventors must be involved in their invention development each step of the way to enable them to take a product from conception to commercialization.

Becker was born, raised and educated in South Dakota. When moving with her husband and two children to Minnesota in 1979, she became involved in these varied community activities: Redwood Area Chamber of Commerce Director; Blandin Leadership Training; Veritas Study Club President, Secretary and member; Cancer Society Board; United Way volunteer; Church Administrative Committee, Circle member and Sunday School teacher; Church Women's Business and Professional Group Board.



RUTH BERNSTEIN Biography

Ruth Bernstein was born in 1935 in Chicago. She moved to a sand dune village on the southern shore of Lake Michigan in Indiana in 1938, graduated from high school in 1953 at Elgin Academy in Elgin, IL, and graduated from College at University of Miami with B. Ed. in 1958.

Married in 1957, she had 4 sons between 1958 and 1966, and divorced in 1970. Three of her sons are now married, and she is the proud grandmother of a seventeen-month old girl. Her sons are all professionals in Minnesota and Wisconsin.

Ruth worked as a substitute teacher from 1958 to 1968, and also worked for the Lake County welfare department doing foster home studies and child day care licensing renewal investigations. She was also a Job Developer for the federally funded Concentrated Employment Program.

Ruth was also a Physical Education teacher for the Gary Public School System. During summer breaks, she worked in the summer recreation program - re-writing the Arts and Crafts curriculum. Her unique approach for acquiring materials for the Arts and Crafts program included involvement from area business and industry. They donated manufacturing byproducts and raw materials.

Ruth's career as an inventor began as her teaching career ended in 1975. The invention process began gradually - coming to fruition in 1987. This time frame included work with SCORE and other invention organizations in Indiana and Illinois.

After her 1990 move to Minnesota, she joined the Inventors' Technology and Transfer Society, pursued the patenting and marketing of the Expressory™ Scarf, and joined the advisory board of the Young Inventors' Fair. Other memberships include; Surface Design of Minnesota, Upper Midwest Bead Society, and Minnesota Fashion Design Consortium. Other interests include; swimming, skiing, scuba diving, sewing, and skating.

3320 Louisiana Ave. S. #202 / St. Louis Park, MN 55426 (612) 933-8911

WES CUTTER
VICE PRESIDENT, PRODUCT PLANNING AND DEVELOPMENT

As Vice President of Product Planning and Development of NordicTrack, a multimillion dollar Minnesota corporation, Wes Cutter is extremely knowledgeable and experienced in invention and has demonstrated proficiency in the administration of programs that encourage and are related to inventions. In addition to personally having six patents issued and six patents pending, Wes has worked closely with thousands of private inventors helping them to successfully bring their inventions to market.

Through membership and active participation with several state and national invention organizations, Wes has given guidance through public speeches, workshops, and articles on inventions. He has developed several new methods to encourage and enhance the performance and appreciation of inventions and the people who invent. Wes has also assisted with developing grants, scholarships, and awards for invention and has become fluent in the information services relating to invention.

At NordicTrack, Wes has built a very unique product development program where most of the new product ideas come from the private inventor, thus encouraging inventions and the marketing of private inventions to the general public.

Wes' degrees in statistics, music and his MBA, along with his background in manufacturing, engineering, prototyping, industrial design, and patent work makes him uniquely qualified to offer technical assistance for inventors and develop programs that offer such technical assistance.

With Wes' travel around the world talking to inventors, he brings a unique, global viewpoint to any discussion. His recent success in signing an exclusive contract with the Cosmonaut Training Center in Russia showcases his abilities to deal with foreign cultures and demands.

As a corporate executive, Wes has vast experience with general business that is necessary in developing and maintaining budgets, preparing detailed reports with concrete recommendations, evaluations, and initiatives on the support of invention activity.

At NordicTrack, Wes has worked with, encouraged, and assisted thousands of private inventors. As an inventor himself, he comes with the knowledge and experience of what it takes to develop, patent, and market an invention. This unique approach helped NordicTrack win the Product Development Management Association's Corporate Innovator Award along with Apple Computers in 1994.

Henry Buchwald, M.D., Ph.D.: Summary

Dr. Buchwald's education consisted of the Bronx High School of Science, NYC; Columbia College (Junior Phi Beta Kappa, Class Valedictorian); the College of Physicians and Surgeons of Columbia University (Alpha Omega Alpha); and the University of Minnesota (M.S. in Biochemistry, Ph.D. in Surgery). Immediately before coming to the University of Minnesota, in 1960, Dr. Buchwald served for two years as Chief Flight Surgeon, Headquarters, Strategic Air Command, U.S.A.F. in Omaha. In the Air Force, he logged a considerable number of flying hours and was responsible for several innovations in the ready status of flight crews.

Dr. Buchwald's research and scholarship has been centered in three areas: the management of hypercholesterolemia and atherosclerosis, the management of morbid obesity, and the invention and development of implantable infusion devices. In the lipid/atherosclerosis field he, and his fellows, have elucidated numerous basic physiologic mechanisms. He initiated the partial ileal bypass operation which was used as the intervention modality in the Program on the Surgical Control of the Hyperlipidemias (POSCH), a \$60,000,000 intervention trial for which Dr. Buchwald served as the Principal Investigator. Dr. Buchwald coined the term metabolic surgery and authored a book of that title. In the obesity field, Dr. Buchwald has performed approximately 2,000 weight-reduction procedures. He modified the jejunoileal bypass operation for obesity, and his abdominal closure technique has reduced the incidence of wound infections with this operation to less than 5%. Dr. Buchwald is the author of 275 peer-reviewed publications, 52 book chapters, and 5 books. Dr. Buchwald belongs to essentially all of the major societies in his fields of interest. His work has been recognized by his receiving the Samuel D. Gross award, the Distinguished Service Award of the Association for Academic Surgery, and the Clinical Scholar Award of the University of Minnesota Hospital and Medical School.

In the field of invention, Dr. Buchwald's biomedical engineering group was responsible for the invention of the first implantable infusion pump, the exploration of this device in the laboratory, and its original clinical application. There have been approximately 40,000 implantations of this pump to-date. The prototype of all implantable infusion ports, which currently represents a \$50,000,000 annual world-wide market, was invented in Dr. Buchwald's laboratory. His group has also been responsible for an implantable pressure-temperature regulator, several solvents for lipids and peptides, a new peritoneovenous shunt, an implantable blood glucose sensor, and a device for joint entry and drug delivery. A two-way, non-clotting catheter from his group will soon be released to the medical market. A second generation, spring-driven, implantable infusion pump, which is more economic to produce than the original implantable infusion pump, has currently been released for animal applications. For his bioengineering work, Dr. Buchwald has been given the Outstanding Achievement Award of Minnesota Medical Alley, was named Inventor of the Year and inducted into the Minnesota Inventors Hall of Fame in 1988, and has served as the President and Chairman-of-the-Board of the Minnesota Inventors Hall of Fame.

Entering his more senior years, Dr. Buchwald is taking an increasing interest in the processes of university/industry technology transfer, and in the three-way partnership of government, industry, and the university in improving healthcare technology and invention.

Kristian M. Dahl- Alternate, 3rd Dist.

Kristian Dahl has been a resident of Minnesota for twenty years. He was born in Copenhagen, Denmark where he lived for just a year. He later lived in Washington, D.C. and San Francisco, CA. He moved to Hopkins, Minnesota when he was four. He later moved to Minnetonka.

Kristian attended Hopkins High School in Minnetonka, graduating in 1988. He was active in Youth In Government, Model U.N. and local politics. He attended Brandeis University in Boston for a year, then transferred to Wesleyan University in Middletown, CT. He graduated Phi Beta Kappa and Summa Cum Laude from Wesleyan in 1992 with a B.A. in Government. At Wesleyan, he was editor-in-chief of the campus conservative paper, *The Wesleyan Review*. His academic specialty was interest group politics, and completed an honors thesis on evangelical Christian interest groups in America. Other academic interests include Chinese history, the U.S.-Korean security relationship, and Nigerian politics.

Kristian currently attends the University of Minnesota Law School. He is working with environmental law and legal issues surrounding local, state and federal government. He is pursuing a joint degree with the Hubert H. Humphrey Institute of Public Affairs. He will graduate with a J.D. and M.A. in public policy in 1996. At the Humphrey Institute, Kristian is concentrating in Technology, Energy and Environmental Policy. He is interested in science-state relationships and property rights approaches to environmental problems.

Kristian was married to Julie Todd last August, and got an energetic and happy two year-old named Ryan through the union. They now all reside in the Seven Corners area of Minneapolis. In past summers, Kristian has worked as an assistant editor of the *National Interest* magazine and in the development office of Citizens for a Sound Economy, both in Washington, DC. Kristian also spent a semester at the American University there, while interning for Rep. Robert K. Dornan of Southern California.

Kristian's outside interests include jogging, politics, reading and writing. Kristian and his family are members of the Church of the Epiphany in Coon Rapids. He hopes to one day serve in the government, either as an elected official or as a staffer. He is also interested in legal work related to sounder environmental policies. He is currently a member of the Federalist Society, National Association of Scholars, the National Rifle Association, the Catholic League and the Knights of Columbus. Kristian and his family would like to eventually settle here in Minnesota, perhaps after some time in Washington.

JUAN J. DIAZ

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EDUCATION

Ph. D. in Industrial Engineering, North Dakota State University, May, 1988.
M.S. in Applied Statistics, North Dakota State University, May, 1991.
M.S. in Industrial Engineering, North Dakota State University, October, 1979.
B.S. in Mechanical and Electrical Engineering, Instituto Tecnológico y de Estudios Superiores de Monterrey, Monterrey, N.L., MEXICO, June, 1971.
Engineering in Training Examination (EIT): taken in Fargo, N.D. in August, 1986. Certificate Number 5672.
Professional Engineer Registration in the state of Minnesota, Feb. 1990, License Number 020398-8.

PUBLICATIONS

Diaz, J.J., "Technology in Developing Countries: Costa Rica", Proceedings of the North Central Council of Latin Americanists, St. Cloud, Mn., October 1990.

Diaz, J.J., K. Ebeling, and G. Radi, "Distributed Short Interval Scheduling in a Shop-Floor Network", Computers in Engineering 1987, The American Society of Mechanical Engineers, Volume two, New York, August 1987.

Diaz, J.J., G.Rabi, and K. Ebeling, "Scheduling in a Shop-Floor Network", Computers and Industrial Engineering: An International Journal, Pergamon Press, Atlanta, Ga., Volume 13, 1987.

Diaz-Nunez, J.J., L.A. Perez G., O. Hernandez L., "Cuaderno de Ejemplos y Problemas en Probabilidad y Estadística", Dirección General de Educación Tecnológica Industrial, SEIT-SEP, Mexico, D.F., 1984.

Diaz-Nunez, J.J., L.A. Perez G., and R. Cavazos C., "Introducción al Concepto Moderno de Control de Calidad", Industrial Engineering Magazine, Volume One, Number 5, Instituto Tecnológico de Cd. Juárez, 1984.

Diaz-Nunez, J.J., "El Papel del Servicio Social en la Carrera

DANIEL A. FERBER

RESUME IN BRIEF

- 1947-1951 B.A. Cum Laude (English Literature and Philosophy)
Wabash College, Crawfordsville, Indiana
- 1950-1953 Pitcher, New York Yankee Baseball System
- 1952-1954 M.A. (Comparative Literature), Indiana University,
Bloomington, Indiana
Head Counselor, Graduate Residence Center
- 1954-1962 Ph.D (Higher Education Administration), Indiana
University, Bloomington, Indiana
Headmaster, I.U. Men's Residence Halls
- 1962-1963 Associate Director of Development (Fund Raising)
University of Pittsburgh, Pittsburgh, Pennsylvania
- 1963-1967 Director of Development (Fund Raising), University
of New Hampshire, Durham, New Hampshire
Director, New England Center for Continuing
Education
- 1967-1971 Dean of Academic Affairs and Vice President for
Academic Administration, Gustavus Adolphus College,
St. Peter, Minnesota
- 1971-1975 Founder, Commission on Minnesota's Future
Chairman, Minnesota Learning Society
Chairman, Minnesota Intergenerational Education
Consortium - the latter two of which led to the
national Mondale (Humphrey)-Fraser Lifetime Learning
Act (1975), the first demonstration of Inventive
Federalism
- 1975-1980 Founded and still chairs the Institute for
Invention and Innovation (3I), a 501(c)(3), non-
profit vehicle designed to drive the development of
the "Minventia Project", i.e. Minnesota as the
global invention capitol.
- 1980-1993 Developed and established the Minnesota Board of
Invention, which along with 3I, comprise the basic
infrastructure undergirding the projected, ten-year
evolution of Minventia (1991-2001).

11/12/93

DONNA J. MCBRIAN IS A RETIRED PUBLIC SCHOOL EDUCATOR. SHE SERVED THE BROOKLYN CENTER SCHOOL DISTRICT AS AN ELEMENTARY TEACHER, GRADES THREE THROUGH SIX FROM 1956 TO 1966. IN 1967 SHE WAS EMPLOYED BY THE ST. LOUIS PARK PUBLIC SCHOOLS. UNTIL HER RETIREMENT IN 1989 SHE SERVED AS A TEACHER, INSTRUCTIONAL CONSULTANT, AND K-12 GIFTED EDUCATION COORDINATOR.

SHE EARNED A B.A. DEGREE AT NORTHWESTERN COLLEGE IN 1956, A M.ED AT MACALESTER COLLEGE IN 1962, AND AN EDUCATIONAL SPECIALIST DEGREE IN GENERAL ADMINISTRATION AT THE UNIVERSITY OF ST. THOMAS IN 1981.

DONNA WAS ONE OF THE INITIATORS OF THE YOUNG INVENTORS FAIR PROGRAM WHICH IS NOW COORDINATED BY THE METRO EDUCATIONAL COOPERATIVE SERVICE UNIT. SHE HAS BEEN AN ACTIVE MEMBER OF THE ADVISORY BOARD THROUGH THE YEARS. AS GIFTED EDUCATION COORDINATOR IN HER DISTRICT DONNA TAUGHT INVENTING TO STUDENTS AND PROMOTED THE UTILIZATION OF AN INVENTING CURRICULUM AMONG TEACHERS. SHE ALSO HAS PRESENTED INVENTION WORKSHOPS IN VARIOUS DISTRICTS IN MINNESOTA, IN KENTUCKY, AND IN MARYLAND. DONNA HAS PUBLISHED AN ARTICLE ON THE YOUNG INVENTORS FAIR PROGRAM IN A NATIONAL PERIODICAL FOR TEACHERS. (ARTICLE ATTACHED.)

DONNA HAS BEEN THE RECIPIENT OF SEVERAL GRANTS DURING HER CAREER INCLUDING ONES FROM THE NORTHWEST AREA FOUNDATION AND THE U.S. OFFICE OF EDUCATION. SHE HAS TAUGHT SEVERAL COLLEGE CREDIT COURSES THROUGH THE COLLEGE OF ST. TERESA AND MANKATO STATE UNIVERSITY. DONNA WAS ALSO A PART TIME CONSULTANT FOR SCIENCE RESEARCH ASSOCIATES FROM 1972-74.

SHE WAS A MEMBER OF THE EXECUTIVE BOARD OF THE MINNESOTA COUNCIL OF TEACHERS OF ENGLISH FROM 1974-79 AND SERVED AS PRESIDENT DURING THE 1976-77 YEAR. IN 1979 DONNA WAS A MEMBER OF THE TEAM WHICH ORIGINATED THE MINNESOTA EDUCATORS OF GIFTED AND TALENTED ORGANIZATION. SHE SERVED AS TREASURER AND THEN MEMBERSHIP CHAIR UNTIL 1988. DONNA HAS CHAIRED AND SERVED ON MANY EDUCATIONAL COMMITTEES DURING HER CAREER. SHE NOW CONCENTRATES EFFORTS ON THE YOUNG INVENTORS FAIR PROGRAM, WORKING AS AN EVALUATOR FOR THE FUTURE PROBLEM SOLVING PROGRAM, AND HELPING TO PLAN A CREATIVITY CONFERENCE FOR METRO AREA STUDENTS.

PHILIP M. GOLDMAN

BIOGRAPHICAL SUMMARY

Phil Goldman is presently an Officer with the Minneapolis law firm of Fredrikson & Byron, practicing in its Intellectual Property Law Department. His practice includes a wide variety of clients, from the individual inventor to high technology clients involved in the research and development of medical devices and biotechnology-related products.

In his practice, Phil represents clients on matters such as patent and trademark applications and prosecution, and related agreements including disclosure, license, and strategic alliance agreements. He has also been active in a number of professional organizations, including the Minnesota Intellectual Property Law Association, the Minnesota Biotechnology Association, and the Association of University Technology Managers.

Prior to joining his present firm, Phil worked for over 10 years in the Office of Intellectual Property Counsel at 3M, where he was responsible for intellectual property law matters on topics relating to biotechnology, human and animal health care products, and pharmaceutical and chemical matters.

Prior to earning his law degree at William Mitchell College of Law in St. Paul, Phil spent many years at the laboratory bench as a research biochemist, including at the VA Medical Center in Minneapolis, and the Wisconsin Regional Primate Research Center in Madison Wisconsin. Phil was born and raised in Milwaukee, Wisconsin, and earned his Bachelor's degree in Biochemistry from the University of Wisconsin and a Master's degree in Microbiology from Colorado State University.

His volunteer activities include a long history of involvement in community affairs and pro bono legal activities, both as 3M's Pro Bono Coordinator and presently as a member of Fredrikson & Byron Pro Bono Committee.

In his role on the Board of Invention he looks forward to bringing his background and interests to bear in a multidisciplinary setting aimed at the encouragement of innovation.

John G. (Jack) Hawk

840 10th Street
Granite Falls, MN 56241
Work (507) 537-7386 Home (612) 564-3347

Work Experience

****Regional Director,** Southwest State University's Small Business Development Center. Develops and Coordinates the activities of the SBDC consulting network throughout southwestern Minnesota. Involved in developing interaction between the various service providers to small business in the region. Areas of activities of the SBDC include; Advocacy, finance and investment, private sector initiatives, international trade, minority small business, procurement assistance, small business innovation and research programs, veterans, and women business ownership.

July 1987 to Present.

****Small Business Management Coordinator,** Southwestern Technical College. Worked as a consultant for 40 businesses within a 60 mile radius. Responsibilities included; Accounting systems, financial statements, payroll, inventory control, buying, sales promotions, personnel management, advertising layouts, salesmanship, collections, and public relations.

Developed and initiated the Small Business Management Program for the Technical Colleges in Granite Falls, Willmar, Canby, Jackson and Pipestone. The program has been continued successfully.

December 1978 to July 1987.

****General Manager and Buyer,** Denny's, Incorporated. Managed and purchased for four men's stores. Responsibilities included; Personnel, inventory, advertising, payroll, and purchasing.

1978

****Merchandise and Advertising Manager,** Fashionette, Incorporated. Handled all merchandising and advertising responsibilities for three stores dealing with women's ready to wear.

1977

****Manager,** C.R. Anthony Company. Management position in three of the C.R. Anthony Company stores.

1968 to 1977

Specialized Achievements

- **Certified Economic Development Finance Specialist -National Development Council
- **Quality Training (50 Hours) - 1991
- **Completion of Commercial Lending School sponsored by Minnesota Banker's Association.
- **Completion of Commercial Lending School Graduates Program.
- **Member of International Association of Small Business Management Instructors.
- **Current Instructors license for Small Business Management in the Technical College System.
- **Instructor of the year, 1986-1987.

Organizations

- | | |
|--|--|
| **Ad-Hoc Committee, SBM State Dept. | **Community Development Board |
| **Treasurer, MN Assoc. of SBM Instr. | **Fire Department/Rescue Squad |
| **Retail Trades Committee Chairman | **Past President Jaycees |
| **City Council | **Past President Chamber of Commerce |
| **Board of Directors, Golf Club | **Board of Community Education |
| **Involved in search committee activity for Southwest State University | **Interview team for Technical College's new SBM instructors |
| **Advisory Board Member - Agricultural Utilization Research Institute | **Board Member - Southwestern Minnesota Economic Development Professionals |
| **Chairman - Housing & Redevelopment Authority and Port Authority | **Evaluation team - State of Minnesota Technical College System |

Steven, Levinson, Ph.D.
Route 1, Box 223
Newfolden, MN 56738
(218) 681-4240 extension 447 (days)
(218) 449-3975 (home)

Education

- ▶ Ph.D. in Clinical Psychology. University of Rochester, 1973
- ▶ B.A. in Psychology. City University of New York, 1969

Current Employment

- ▶ Director, Mental Health Division, Northwest Medical Center, Thief River Falls, Minnesota. (Since 1973).

Full responsibility for developing and managing a comprehensive, hospital-based rural mental health program that includes acute inpatient, outpatient, residential, community-based and consultation and education services; serve on medical center's quality assurance and strategic planning committees; serve on various county mental health advisory councils; created, donated funds for and operate medical center's invention-promotion program, "We Value Innovation."

- ▶ President/CEO/Chairman, Behavioral Dynamics, Inc., Thief River Falls, Minnesota. (Co-founded business and assumed various positions within company since 1987.)

Small for-profit business established to develop, manufacture and market health care/self-improvement product I invented.

- ▶ Clinical Professor of Psychology, University of North Dakota. (Various appointments since 1975.)

Invention-Related Activities

- ▶ Inventor of a successfully commercialized electronic medical/self-improvement device (tradenamed "MotivAider") designed to enable users to make desired behavioral changes. Other medical/self-improvement inventions under development.

Product is in use world-wide in various industries including health care, education, training and sports.

- ▶ Member, Economic Development Planning Committee, Northwest Regional Development Commission; Thief River Falls, Minnesota. (Since 1987.)

(over)

Successfully promoted the stimulation of homegrown innovation as a key rural economic development strategy; developed invention-promotion methods, programs and publications.

- ▶ Instigated the development of "Operation Earmuff," a program designed to teach and inspire school children in northwestern Minnesota to invent. (Since 1991).

Brought three agencies together to establish program; provide on-site presentations on inventing to area schools; assist schools in incorporating inventing into curriculum, in designing and implementing inventor events, and in promoting community involvement/awareness.

- ▶ Provide free "invention counseling" to self-referred inventors and those referred by area economic development agencies and other agencies and programs. (Since 1988.)

Provide inventors with early-stage information, advice, encouragement and referral.

- ▶ Frequent public speaker on topics dealing with inventing/innovation, entrepreneurship, motivation/persistence.

Personal Statement

I believe passionately in the role that inventing can play in creating economic development and in improving the quality of people's lives. As my volunteer activities suggest, I am not only interested in inventing "things," I am personally committed to *inventing* and implementing *methods* that will inspire more people to invent and that will better equip inventors to pursue their ideas successfully for the benefit of society. I believe that the combination of my expertise as a psychologist and my *real world experience* as an inventor, invention counselor and entrepreneur will allow me to contribute to the Board a unique perspective that emphasizes the "human element" in inventing.

PERSONAL PROFILE
SEPTEMBER 1993

LUTHER T. PRINCE

HOME

3521 W. 24TH ST.
MINNEAPOLIS, MN 555416
TEL. 920-6788

OFFICE

3041 4TH AVE SO.
MINNEAPOLIS, MN 55408
TEL. 822- 1628

CAREER HIGHLIGHTS

PRESENT:

President-M'Power Inc
Business Development Director-UrbanVentures Inc.
Specializing in inner-city job creation initiatives

PRIOR:

ASSISTANT COMMISSIONER-MINNESOTA DEPARTMENT OF LABOR & INDUSTRY
Managed the Workers Compensation and General Support Divisions

PRESIDENT- PRINCE & ASSOCIATES

Conducted market research, developed products, and offered them to organizations that wanted to expand or diversify their markets

PRESIDENT & CEO-AULT INCORPORATED

Increased the company's new worth from -\$233,000 to \$8,433,000 by:

- * Securing in excess of \$1,500,000 in equity and debt financing
- * Formulating a totally new corporate strategy and product niche
- * Increasing sales from \$500,000 to \$17,00,000
- * Achieving a 36% compounded annual profit growth rate for 5 years
- * Facilitating a public stock offering that raised \$5,000,000

R&D ENGINEERING MANAGER-HONEYWELL INC.

Directed research and development of advanced flight control systems for supersonic aircraft and ballistic missiles

EDUCATION:

BS in Electrical Engineering-Massachusetts Institute of Technology
MS in Electrical Engineering-Massachusetts Institute of Technology

AWARDS:

Minnesota Business Hall of Fame
Minneapolis Small Businessman of the Year
Charles Poe Award from Metropolitan Economic Development Association(MEDA)
Commendation from the National Association of SBIC's

CIVIC ACHIEVEMENTS AND ACTIVITIES:

Created and implemented, while President of the Minneapolis Urban League, an initiative in economic development that ultimately led to the founding of MEDA

Previously served on the Boards of: the United Way, Big Brothers, the Mpls Urban Coalition, the Mpls Employers Association, and the Urban League

Currently serves on the Boards of Dunwoody Institute, and St. Paul Academy and functions on the marketing committees of both institutions

Janet Robb is a Program Planner in *The Gifted Center* at the Metropolitan Educational Cooperative Service Unit. *The Gifted Center* provides library, information, networking, and inservice workshop services to gifted program teachers, coordinators, and administrators.

Janet coordinates the *What If? Young Inventors Program and Fair* student program. The *Young Inventors Program and Fair* has been in existence for fourteen years and Janet has been coordinator for eight years. The *What If? Young Inventors Fair* is a year-long program offered in the Twin Cities metro area to students in grades 4-9. The program consists of several coordinated, interrelated workshops and events which teach and encourage students to invent. Inventing is taught as a vehicle for expressing creativity which is both satisfying to the student and beneficial to society. Each year the program culminates in a display of student inventions, the *Young Inventors Fair*, which is open to the public.

Published materials include the *Young Inventors Fair Organizational Manual, Curriculum Guide, Student Log Book, and Prior Art Gazette*. These materials are available at cost throughout the metro region, state, and nation. In October 1993, the Minnesota Academic Excellence Foundation reproduced and sent copies of the updated materials to all of the ECSU regional invention coordinators.

Janet works with the Minnesota Inventors Congress and the other regional ECSU's to provide the opportunity for young inventors to participate in the *Minnesota Student Inventors Congress* statewide event in June.

She chairs the YIF Advisory Committee which meets during the school year to plan and implement the *Young Inventors Program and Fair*. Cosponsors of the program are the Minnesota Council of the Gifted and Talented (MCGT), the Metro Educators of the Gifted and Talented (Metro EGT), and the Science Museum of Minnesota (SMM).

Roeper Review, a national publication, asked Janet to write an article about the *Young Inventors Fair*. The article *Young Inventors Ask What If?* was published in the May/June 1993 issue.

A *Medtronic STAR Grant* provided Metro ECSU funding for the 1993-94 school year to offer *Young Inventor Fair* training and materials to two hundred teachers who work with students of color and economically disadvantaged students. These teachers will in turn encourage these students to participate in the invention program. One hundred student *Young Inventors Fair Entry Form* review scholarships are provided by the grant. The training links science and invention in the classroom.

Janet is also chairing a Metro ECSU steering committee for developing another student program focused on creativity and problem solving. Coordinators and other teachers or district staff involved in *Future Problem Solving, Odyssey of the Mind, and Young Inventors Fair* are on the steering committee.

Janet's educational background includes a BS in Elementary Education and a MA in Art Education. She has been an elementary teacher and art resource teacher in the Roseville Area Schools. She also is certified in early childhood education and has been a nursery school teacher and organized an Early Childhood Family Education resource library in Roseville. More recently she has been an adjunct art education instructor at Concordia College in St. Paul.

November 1993

Russ Rooney

Brief Biography

Origination: I am from the St. Cloud area (Sauk Rapids).

Education: My undergraduate degree in Medical Technology and Natural Science is from St. John's University. I have taken graduate courses from the University of St. Thomas.

Occupation: I am currently employed as a clinical account manager for a medical reference laboratory. Also, early this year I started a company which will specialize in medical research and laboratory testing related to gastrointestinal bleeding.

Recreation: Racquetball, basketball, volleyball, skiing, flying, traveling, dancing, to name a few. Unfortunately, there is little time for recreating.

Obligation: Richfield Curriculum Advisory Board, Richfield Human Rights Commission, Optimist Club, Knights of Columbus, Camp Friendship, Global Horizons, MN Republican Coalition for Life, MN Society of Medical Technology, SD63 Republican executive committee, Toastmasters.

Intention: Contribute my time and talents towards the objectives of the State Board of Invention.

Expectation: The adage, "You get more than you give when you give more than you get", is appropriate.

Conclusion: A quote for cogitation.

Invention breeds invention.

Ralph Waldo Emerson

PATSY O. SHERMAN

AT TIME OF RETIREMENT: Manager of Technical Development
(March 1, 1992) 3M - Technical Development

EDUCATION: BS Gustavus Adolphus College, St. Peter, MN 1952
Magna Cum Laude, Major: Chemistry, Mathematics

PROFESSIONAL EXPERIENCE: 1952-1981. research chemist, research specialist,
1952-1992 3M senior research specialist and laboratory manager
in Center Research Laboratories, Chemical Division,
Chemical Resources Division.
1982-1992 Manager Technical Development

RESEARCH AREAS: Polymer chemistry, fluorochemical polymers,
polymerization processes, surface chemistry,
repellent textile treatments. 16 issued U.S.
patents and several publications on above subjects.

MEMBERSHIPS AT TIME OF RETIREMENT (3-1-92) Active in Amer. Chem. Soc. only
GMI Engineering and Management Institute Board of Trustees
Gustavus Adolphus College Board of Trustees
Augsburg College Metropolitan Advisory Panel
American Chemical Society
American Society for Engineering Education
American Society for Engineering Education; Immediate Past Chair,
Continuing Professional Development Division
American Society for Training and Development
Technical Education Network
Minnesota Technical Education Committee
3M Institutional Review Board for Medical Devices
3M Technical Education Advisory Committee
3M Technical Council (R&D Directors)
3M Corporate Technical Planning and Coordination Operating Committee
3M Corporate Technical Planning and Coordination Steering Committee

CURRENT MEMBERSHIP: Board of Directors, National Inventors Hall of Fame

AWARDS AND RECOGNITIONS:

Elected member of Carlton Society 1974 - 3M "Hall of Fame" for
scientific personnel.
Gustavus Adolphus College Distinguished Alumni Award 1975 for scientific
research.
Spurgeon Award (Indianhead Council of BSA) 1980 for career achievements
and community service.
Selected as one of ten women representing career achievements of women
in 3M - 1985 Cited by Textile World magazine as co-innovator of one
of the "ten textile miracles that make the world modern" 1972 - for
development of textile finishes repellent to both oil and water
stains.
Listed in American Men and Women in Science.
Featured in exhibition at University of Minnesota "Her Works Praise Her:
Inventions by Women" - 1988.
Minnesota Inventors Hall of Fame (inducted 1989).



Meter-Man, Inc.
P.O. BOX 746 2 SOUTH MAIN
WINNEBAGO, MN 56098-0746 U.S.A.
Phone 800-338-5756 or 507-893-4806
FAX 507-893-3517



LYLE STEVERMER - PRESIDENT, METER-MAN, INC.

In 1962, Lyle exhibited his weigh-matic farm product at the Minnesota Inventors Congress in Redwood Falls. He earned a First Place in the Agricultural Division and the overall Grand Prize. That product was the first to be manufactured in a company started by Lyle in 1963, now known as Meter-Man, Inc.

Lyle's background in practical mechanics and problem solving has qualified him to engineer and design the varied product line of Meter-Man, which is now marketed world wide.

Meter-Man has for the past five years actively sought to expand its international market working with the Minnesota Trade Office and other Minnesota resources. Minnesota Agricultural Equipment Export Consortium, spearheaded by Meter-Man, is an eight member group designed to assist in the export of agricultural equipment.

Lyle's responsibilities have encompassed all facets of a small business including engineering, product design, production, marketing, facilities management, and financing. The company is currently exploring ISO 9000.

Barry Thompson
6258 Fernbrook Lane
Maple Grove, MN 55311
(612) 559-2748

Resident of Minnesota since 1966. Graduate of the University of Minnesota, School of Management, Bachelor's of Science in Business, 1981.

Twelve years experience in medical products sales and marketing with such companies as; Procter & Gamble, Kimberly-Clark, Tokos Medical, Seismed Instruments, and Urologix, Inc. Currently employed as the National Sales Manager for Sharpe Endosurgical Corporation, a Plymouth based manufacturer of instrumentation for use in laparoscopic surgical procedures.

Professional background includes extensive involvement in both new product and new business development, primarily with developmental stage companies. Significant personal involvement with the local venture capital community and corporate fund raising activities. Active in Medical Alley.

Personal background includes active involvement in new product development for both the medical and consumer products fields.

Married eleven years to Mary Jo Crees-Thompson. One child, Colby, age 6, kindergarten student at Plymouth Creek Elementary, Wayzata School District.

MILTON A. TORATTI
213 West 1st Avenue North
Aurora, MN 55705
(218) 229-3882

Professional Position: Business and Technology Development Specialist; UMD Center for Economic Development- Minnesota Technology Regional Office, Virginia, Minnesota
Lieutenant Colonel (Retired), United States Army, Transportation Corps

Formal Education: 1986: Masters Degree, Business Management, Webster University, St. Louis, MO
1981: Honor Grad, Command & General Staff College, USACGSC, Ft. Leavenworth, KS
1966: B.S. Degree, Social Science/Speech, University of Minnesota, Duluth, Minnesota
1963: A.A. Degree, Pre-Law, Virginia Jr. College, Virginia, Minnesota

Leadership / Management Work Experience: *Business and Technology Development Specialist* (12/89 to present) Minnesota Technology Regional Office / UMD Center for Economic Development, Virginia, MN (a cooperative program)

- Responsible for consultive services to inventors, small businesses, entrepreneurs, manufacturers, and start-up ventures concerning all aspects of business development.
- Service upwards of 100 clients annually. Services included, but not limited to, market research, feasibility studies, business plans, strategic plans, product literature searches, financial planning, and organizing manufacturing consortiums.
- Specialized assistance for new product development including proprietary protection assistance, patent searches, prototype development, test marketing, organizing innovation workshops, and securing finances for start-up businesses.
- Plan, organize, and present advanced manufacturing skills and knowledge workshops to include JIT, TQM, Participatory Management, ISO 9000, Export Development, and Product Development.
- Plan and organize the Technology Transfer Training course for the Center for Economic Development.
- Plan and organize the National Innovation Workshop course for the Center for Economic Development.

Account Executive (6/89 to 9/89) WEVE Radio, Eveleth, MN
General Manager (6/88 to 6/89) Lionshead Resort, West Yellowstone, MT
Instructor, Range Technical College (1989 to present)

- Responsible for preparing lesson plans and instructing courses in conflict resolution, principles of management, personal effectiveness skills, and business development.

Associate Professor, Commander, Logistician, Staff Officer (1966-1988) United States Army

- Served in a series of progressively demanding positions at all levels of staff and command. Combat command duty, foreign duty, general officer personal staff, university professorship, and contracting duty have prepared me for leadership and management positions in industry, business, government, and educational institutions. Over my military career I have provided leadership for up to 500 personnel; secured a \$10M government housing contract; managed \$12M housing inventory; served as housing director for up to 1500 families; monitored \$49M in annual contracts; transported 45,000 personnel via all modes of transportation in 3 days; maintained upwards of 601 vehicles; controlled the household goods shipments within an 18-county and 3-state area of responsibility; trained all European-Theater Commanders in equal opportunity; increased scholarships by 200% at a major university; led troops in combat; served as an organizational effectiveness and human relations specialist in a major European command; trained and commissioned regular and reserve officers at two separate major universities.

High School Teacher (1965-66) Duluth Public Schools

- Speech Teacher, forensics program, and social studies at Morgan Park, Central High School and West Duluth Junior High School simultaneously.

Awards:

- Fourteen individual military awards for Valor and Meritorious Service.
- Recipient of the Commanding General's Outstanding Performance Medallion for transportation operations, 1984.
- Selected as the Best Housing Division in Training and Doctrine Command, while serving as Division Chief, Housing Division, Ft. Jackson, S.C., 1986.
- Selected as the Army's "Best Trainer of Trainers" in Human Relations by the Army Research Institute, 1978-79.
- Certificate of Appreciation from General Westmoreland, 1970.

Special Skills and Knowledge:

- Business development skills in all levels of management to include planning, organizing, staffing, directing, controlling coordinating, budgeting, reporting and actuating the manufacturing and business services, and product development.
- Logistics officer for 22 years; able to plan and execute highly complex industrial operations including personnel, supply, transportation, support services, and information management services.
- Organizational effectiveness and group facilitator skills to improve corporate, business, service industry productivity through improved operations, quality assurances, interpersonal communications, and application of group dynamics interventions.
- College associate professor and instructor of staff procedures, ethics, interpersonal communications, learning theory, motivation, leadership stress management, time management criterion referenced instruction, and principles of management.
- Personnel manager, advertising, marketing, sales, business planning, strategic planning, production planning, and financial planning skills and knowledge.
- Equal opportunity and race relations officer with training in affirmative actions.
- Minnesota and Montana State Teachers Certificates in social sciences and speech.
- Invention and innovation specialist skills able to plan, monitor, and execute successful business products development and service operations to commercialize new products into the market place.

Training and Other Education:

- National Innovation Workshop, Grand Forks, ND 1993
- Pricing Seminar, UMD Center for Economic Development, Duluth, MN 1993
- Total Quality Transformation (TQT), PQS Inc. & Duluth Technical College 1993
- ISO 9000 Auditors Training, Applied Quality Systems 1992
- Entrepreneurial Marketing Training, CED-UMD 1991
- Minnesota Quality Award Workshop, Hibbing Community College 1990
- Operations Collaboration-Industry/Education, Eveleth Technical 1990
- Inventors Resource Workshop, Redwood Falls, MN 1990-91
- Export Development Training Program, Minnesota Trade Office 1990-91
- Managing and Financing Independent Businesses, IRRRB, Eveleth, MN 1990
- MT State Wastewater Mgmt Training, Montana State University 1988
- Symphony Computer Training, University of Toledo 1988
- Leadership Excellence in Marketing and Advertising, Ft. Monroe, VA 1987
- Performance Work Statements, Logistics Mgmt Center, Ft. Lee, VA 1985
- Installation Traffic Management Course, Ft. Eustis, VA 1984
- Prevention of Sexual Harassment Training, Ft. Jackson, VA 1984
- DOD, Equal Opportunity and Discussion Leaders Course, Europe 1978
- Criterion Referenced Instructor Course, Vilseck, FRG 1977
- Management Practices and Leadership/Management, Ft. Riley, KS 1975
- Transportation Officer Advanced Course, Ft. Eustis, VA 1975
- Defense Race Relations Institute, Patrick AFB, FL 1973
- Stevedore Officers Course and Air Trafficability, Ft. Eustis, VA 1968
- Forward Observers School, 1st Cavalry Div., An Khe, VA 1968
- Transportation Officer Candidate School, Ft. Eustis, VA 1967

MINNESOTA BOARD OF INVENTION KICK-OFF MEETING
NOVEMBER 24, 1993, 8:00-10:00 A.M.
Room 125, STATE CAPITOL BUILDING

AGENDA

- I. Greetings/Remarks: Curt Johnson, Deputy Chief of Staff,
Office of the Governor

- II. Historical A. Spirit/Humanistic Philosophy/Social Policy
Context B. State/national socio/economic development strategy
for the C. 1993 legislative language: MN Board of Invention
MBI D. Possible 1994 legislative action

- III. Introduction of material describing the Minnesota State Arts Board:
presentation and discussion at a later meeting. Meanwhile, please study
the Arts Board material in folders for its suggestive value, e.g., long-
term focusing/objectives, structure, grant-making guidelines for
organizations and individuals, staffing pattern, budget. Please share
booklets (only ten sets available) with your alternate colleagues

- IV. Presentation of Minnesota Project Innovation: Keith Myhre, Chairman of
the MPI Board of Directors.

- V. Miscellaneous housekeeping/operational details:
 - A. Changes (spelling, addresses, telephone numbers etc). on
member/alternate list mailed earlier

 - B. Distribution of any missing biographical statements

V. Housekeeping (Cont.)

- C. Suggested December noon meeting - 12:00-2:00 p.m. during week of December 13-17; date/place not yet determined. Programmatic theme: Survey of existing programs with accompanying materials (ten minutes each please), e.g., Inventors and Design Education Association (Bill Baker) Minnesota Inventors Congress (Penny Becker) Inventors Club of MN /I T & T Society (Ruth Bernstein) Minnesota Inventors Hall of Fame/U of M Office of Research and Technology Transfer (Henry Buchwald) Minnesota Patent Law Overview (Phil Goldman) Small Business Development (Jack Hawk and Luther Prince) Northwest Minnesota Inventor Activities (Steve Levinson) Precollegiate (K-12) Young Inventor Educational Programs (Janet Robb and Donna McBrian) Large Corporation R&D Programs (Patsy Sherman) Northeast Minnesota Inventor Activities (Milt Toratti) Social inventions plus a cumulative list of proposals from prior initiatives/studies/reports, all toward a more "comprehensive, integrated invention/innovation and marketing system," the infrastructure to establish Minnesota as the global invention capitol (Minventia). Others?
- D. January 12:00-2:00 p.m. noon meeting likely at 3M: the 3M corporate model and its statewide implications plus other relevant agenda items
- E. Possible philanthropic donation of central office physical facilities and staff support. See letter in your folders from John Labosky, President, Minneapolis Downtown Council
- F. Status of Board appointments. The Senate still must "advise and consent;" District One vacancies yet unfilled
- G. "Alternate status", what is it? Verbal but not voting participation unless an alternate is properly acting for the appropriate, absent voting member
- H. Comments, questions, suggestions
- I. Adjournment: Best wishes for a Happy Thanksgiving!

Curt Johnson

First a teacher, then an administrator in colleges over 16 years, president of three community colleges across the 1970s, Curt Johnson is now deputy chief of staff and senior policy adviser to the governor of the State of Minnesota.

For 11 years he headed the nationally known Citizens League -- a Minneapolis-based public-policy research organization widely regarded as the most influential regional, citizen-based operation in the nation. For seven of those years, he was also publisher and regular columnist for the *Minnesota Journal*.

Widely sought as a speaker and consultant on political and social issues -- particularly on problems with major systems such as education, health care, environment, and transportation -- he has served as a consultant to dozens of cities and community organizations.

Johnson collaborates regularly with syndicated columnist Neal Peirce producing newspaper articles for newspapers around the nation. He and Mr. Peirce are co-authors of a book appearing this spring called "*Citistates -- How Urban American Can Prosper in a Competitive World.*" He is heard frequently on Twin Cities television and radio as a commentator on political, government, and media topics.

He serves on the executive committee of the National Civic League and the board of the National Alliance for Redesigning Government; in the Twin Cities he is a trustee of the Minneapolis Foundation and on the advisory boards of the Center for Biomedical Ethics, the Center for Transportation Studies, Minnesota Public Radio, and the Humphrey Institute.

His educational background includes a Bachelor of Arts degree from Baylor University and Ph.D. from the University of Texas.

December 7, 1993

TO: Minnesota Board of Invention Members/Alternates

FROM: Dan Ferber, Convener

SUBJECT: BOARD MEETING, Thursday, December 16, 1993, 12:00-2:00 p.m., Offices of Fredrikson & Byron P.A., Attorneys-at-Law, 13th floor (Frontenac Room), International Centre, 900 Second Avenue South, Minneapolis, MN 55402-3397. Tel: (612) 347-7000

Thanks to Phil Goldman (and his law firm), who also helped finance the mailings for our inaugural meeting, the above location will serve us well for our second gathering. Since this "working luncheon" includes a light buffet, I must inform Phil on Monday, December 13 of anyone who will not be eating at that meeting. For example, Russ Rooney cannot attend and Henry Buchwald cannot arrive until 1:30 p.m. and will have eaten earlier. So if I do not hear from you, I shall assume you will be present for the buffet.

Directions to the International Centre Building are enclosed. Regarding parking, Phil's comments are: "...parking is considerably cheaper in the outdoor lots across Second Avenue than it is underground. Relatively inexpensive parking can also be had in the Mar-Ten ramp on Marquette between 9th and 10th. That ramp has an interior access on one of its floors to the lobby of our building."

Our enabling state law requires that our report, due January 31, 1994 to the legislature and the governor, "must include a review of invention activities in the state" (Subd. 6) [Report.]. To respond to that requirement our December 16 meeting agenda was suggested at our November 24, 1993 meeting (arranged in alphabetical order by name of each presenter), but now is modified as follows:

Joe Alvite - Small (for-profit) Company Invention Resources
Bill Baker - Inventors and Design Education Association
Penny Becker - Minnesota Inventors Congress
Ruth Bernstein - Inventors Club of MN/Inventor's Technology and Transfer Society

Note: Henry Buchwald will present the Minnesota Inventors Hall of Fame and the University of Minnesota Office of Research and Technology upon his arrival about 1:30 p.m.

Wes Cutter-NordicTrack Inc. and Intellectual Properties
Phil Goldman - Minnesota Intellectual Property Law: Patent, Trademarks and Copyrights
Jack Hawk - MN Small Business Development Center Network plus Networking Resources in Rural Minnesota
Steve Levinson - Northwest Minnesota Invention Activities

DECEMBER 16, 1993 MN BOARD OF INVENTION MEETING AGENDA (CONT.)

Donna McBrian (Advis.Comm.Mmbr.)/Janet Robb (Coordinator)
Metro ECSU's Young Inventor Program/Fair (grades 4-9)
Luther Prince-Inventions:An Inner City Job Creation Resource

Note: Patsy Sherman will present large corporation R&D programs as one item at our 12:00-2:00 p.m. 3M meeting (either on 1/12, 13 or 14) hosted by David Sorensen, Exec. Dir., Corporate Tech.Planning/Coordination

Barry Thompson - Medical Alley Association
Milt Toratti - Minnesota Technology Inc./National Innovation Workshop/Brewster Diversified Services Inc./T

Dan Ferber will present (a) social inventions (b) a cumulative list of proposals from prior initiatives/studies/reports and (c) the Institute for Invention and Innovation (3I) at a later meeting if and/or when time permits. Any of the preceding (or overlooked) presentations not heard on December 16 will be scheduled for either our January or February meetings. Since this initial review necessarily must be brief (ten minutes) for each topic, please bring adequate materials wherever possible for later reference and any follow-up questions. In due course, we shall go into greater depth regarding those programs of particular Board interest.

SUMMARY. In this context, we shall have begun to identify: (a) what conventional gaps need to be filled, (b) what current programs exist and/or need to be strengthened and (c) what new areas need to be developed (e.g., social inventions) over the next 8-10 years, all toward the legislatively-described and ultimate "comprehensive, integrated invention/innovation support and marketing system." That system (a cross-fertilizing synergism of a,b and c), supplemented by the required philosophical, policy, programmatic, personnel and physical plant infrastructure, would establish Minnesota authentically as the unquestioned global invention capitol (Minventia). In short, that $M=(a+b+c)+P^b$ equation is the formula for an ambitious but attainable goal of the highest order and clearly in the state's enlightened self-interest.

Such pragmatic idealism also is the essential motivating force for the further national acceptance, growth and diffusion of the broader Inventive Federalism concept, nothing less than a MN catalyst for a U.S. continuous self-renewal strategy. Inventive Federalism, itself a national/state intergovernmental process innovation, thus is being demonstrated for the second time by Minnesota (again so acting as a national R&D laboratory) via our efforts toward Minventia. See attached Abstract of Inventive Federalism I (1975) and its seminal social inventions/innovations: (1) the intergenerational residential campus; (2) intergenerational education; and (3) lifelong learning (so essential to keep citizen minds open to the new ideas Minventia aspires to generate).

P.S. Wes Cutter's enclosed "bio" completes our personnel file.

ON INVENTING THE PROCESS OF "INVENTIVE FEDERALISM"
AND ITS FIRST PRODUCT
"INTERGENERATIONAL EDUCATION/LIFELONG LEARNING"

AN ABSTRACT

Daniel A. Ferber

January 3, 1977

Revised February 9, 1978 and April 1, 1982

"Inventive Federalism" is a process whereby states are encouraged to become voluntary research and development sites to launch social and economic inventions designed to improve the quality of life for all U.S. citizens. The first illustrative product of that process is the systematic development of "intergenerational education/lifelong learning", stimulated initially by the State of Minnesota acting as a self-conscious, systematic "reality-testing" laboratory for the nation.

The first phase of the Minnesota effort was the integration of retired persons (age 55 and over) and Minnesota's six major, traditional pre-collegiate and post-secondary systems (a social invention perceived as a constructive response to unique demographic shifts toward an aging U.S. population) represented by the Colleges of St. Thomas, St. Catherine and St. Benedict, Mankato State University, the Minneapolis Public Schools (Community Educational Services), North Hennepin Community College, St. Paul Vocational-Technical Institute, and the University of Minnesota (Minneapolis). This group came to be known as the Minnesota Intergenerational Educational Consortium. Its purpose was to extend intergenerational educational experiences to such older persons, while simultaneously enriching learning opportunities for the young. The national impact of the Consortium's predetermined and specific humanistic, educational, economic, and socio/political objectives (having been shared with relevant national educational networks and others in Washington, DC), now has been extensive and can be so documented.

The Administration on Aging (HEW) and FIPSE (HEW), the entire Minnesota Congressional delegation, relevant state and national agencies, educational institutions and varied personnel pooled their many contributions. By so doing they demonstrated optimum national impact through cost-effective resource focusing at the state level i.e. the state as an inter-agency, inter-institutional "national invention center for intergenerational education", which emphasized the concentration and consolidation of related action, theory, training, and research in the public interest. The subsequent "nationalization" of the broader lifelong learning concept was designed and originally expressed in the Mondale-Fraser "Lifetime Learning Act of 1975", (included in the authorized Higher Education Act of 1976 as "Title I: Part B, Lifelong Learning, Sections 131-134"). This legislation, signed by President Gerald Ford, was intentionally prompted by the Consortium's intergenerational educational thrust.

Such a state-to-nation initiative was intended as a unique Minnesota Bicentennial contribution. It is calculated to move the United States toward releasing the constructive inventive potential of the American people through such a continuous and organized cultural self-renewal strategy. In such a context, inventive Federalism and the "state as national invention center" concepts are suggested as parts of a possible new economic development and governance process. So if Minnesota can demonstrate and share the nation's leadership burden, other interested states certainly can do likewise on issues or problem areas similarly compatible with their genuine character.

January 3, 1994

TO: Minnesota ^{Daf} Board of Invention Members/Alternates
FROM: Dan Ferber, Convener
SUBJECT: THURSDAY, JANUARY 13, 1994 MEETING, NOON-2:00 P.M. (AGAIN
A WORKING LUNCHEON) OF THE MINNESOTA BOARD OF INVENTION
AT 3M (SEE ENCLOSED PROCEDURAL INSTRUCTIONS AND MAP)

At this third meeting of the Minnesota Board of Invention, hosted by 3M, Patsy Sherman will introduce David Sorenson, Director, Corporate Technical Planning and Coordination. In turn, Dave will illuminate the essential ingredients of the world-renowned 3M corporate culture. For, in that 3M culture, employee inventive and innovative attitudes/behavior are said to be especially encouraged, nourished, harnessed and rewarded.

And it is precisely that continuously self-renewing environment which the Board of Invention, as its central mission, aspires to emulate/develop in various ways for the state (MN Inc.) and its citizens over the years ahead, i.e., toward Minnesota as the prototype national/international model of an "inventive society."

To that end, I remind all of you of our required January 31, 1994 report to the Governor and the legislature. It should include succinct, one page summaries of the programs reviewed at our last meeting, plus those of Penny Becker and Steve Levinson who couldn't be with us. Please send to me that summary before the January 13 meeting (as Janet Robb and Milt Toratti already have done) or be sure to bring it with you to our 3M session.

Our February meeting (date/site details later) should include:

1. presentations by Penny Becker (MIC), Steve Levinson (NW MN invention activities) and Dan Ferber (3I, social inventions and innovations plus additional programmatic/physical plant infrastructure proposals/~~from~~ prior studies/reports);
2. election of officers: chairperson/vice chairperson/secretary;
3. 1994 public (state/Federal government), private (business and industry) and independent(foundations, affluent individuals nonprofit organizations and volunteers) sector support (fund-raising, in-kind donations) initiatives and activities;
4. miscellaneous items.

I look forward to: (a) receiving your summaries for our report to state government, (b) a productive 1994 and (c) seeing you on January 13. Please let me know by Monday, January 10, 1994 if you cannot attend on 1/13/94. And call if you have questions on any of the above.