

# Conference Program

# **AASRC Industrial Innovation Conference**

Baltimore Hilton Hotel, Baltimore, Maryland April 8, 9 & 10, 1980



Conducted

Ву

# AMERICAN ASSOCIATION OF SMALL RESEARCH COMPANIES

8794 WEST CHESTER PIKE, UPPER DARBY, PA. 19082 215-449-2333

# MONDAY, April 7, 1980

| 7:30 pm to | 9:30 pm | REGISTRATION — South Promenade |
|------------|---------|--------------------------------|
|------------|---------|--------------------------------|

| 7:30 p | mto  | 9:30 p  | m REGISTRATION — South Promenade   |               |      |
|--------|------|---------|--|---------------|------|
|        |      |         |  |               |      |
|        |      |         | TUESDAY, APRIL 8, 1980   |               | ٠.   |
| 7:30 a | m to | 9:00 ai | n REGISTRATION — South Promenade   |               |      |
|        |      |         | Co-Chairmen of Conference: DR. HARRY PARS, SISA, Inc<br>RICHARD H. HALL, General |               |      |
| 9:00   | to   | 9:05    | DR. SAMUEL Z. CARDON, President  |               |      |
|        |      |         | American Association of Small Research Companies Welcoming Remarks               |               |      |
| 9:05   | to   | 9:30    | DR. HARRY PARS, President  |               |      |
|        |      |         | SISA, Inc.   |               |      |
|        |      |         | Overview of Conference Objectives  |               |      |
| 9:30   | to 1 | 10:00   | DR. ARTHUR S. OBERMAYER, President  Moleculon Research Corporation               |               |      |
| •      | -    |         | Small Business Innovation — Where the Action Is!                                 | .•            |      |
| 10:00  | to 1 | 10:15   | Coffee Break   |               |      |
| 10:15  | to 1 | 12:00 n | oon DR. JERRY PLUNKETT, Managing Director  |               | ٠. : |
|        | *    | ,       | The Montana Energy & MHD Research and Development                                | Institute, In | C.   |
|        |      |         | Converting Innovation Into Products  |               | :    |
|        |      |         | JOSEPH W. SELDEN The Selden Company  |               |      |
|        |      |         | Problems of Large Company Acquiring Small Company                                |               |      |
|        |      | *<br>#  | NOEL DAVIS   |               | . :  |
|        |      |         | General Mills, Inc.  | 2             |      |
|        |      |         | Case History: Small Company Selling Technology to Larg                           | je Company    | /    |
| 12:00  | to   | 1:00 n  | n Lunch  | •             |      |

|       |    |         | . , ,   |         | _        | •    |        |
|-------|----|---------|---|---------|----------|------|--------|
| 12:00 | to | 1:00 pm | Lunch   |         |          |      |        |
| 1:00  | to | 3:00    | WORKSHOPS #2, #6, #8, #13                       |         |          |      |        |
| 3:00  | to | 5:00    | WORKSHOPS #1, #3, #7, #11                       |         |          |      |        |
| 6:00  | to | 7:00    | Open Bar HOSPITALITY HOUR                       |         |          |      |        |
| 7:00  | to | 8:00    | Dinner  |         |          |      |        |
| 8:00  |    |         | Speaker: DR. D.J. BLICKWEDE, Vice President & [ | Directo | r of Res | earc | :<br>h |

# WEDNESDAY, APRIL 9, 1980

| 9:00 a | m to 11:00 am | WORKSHOPS #4, #5, #9  |
|--------|---------------|---|
| 11:00  | to 11:45      | Free period   |
| 11:45  | to 12:30 pm   | Lunch   |
| 12:30  | to 1:00       | Speaker: CLARKE F. HESS, Commodity Specialist Merrill, Lynch, Pierce, Fenner & Smith, Inc. Commodity Markets in the 80's — How To Fasten Your Seat Belt |
| 1:00   | to 3:00       | WORKSHOPS #10, #12, #14   |
| 3:00   | to 3:15       | Coffee Break  |
| 3:15   | to 5:00       | EXHIBITS  |
| 6:00   | to 7:00       | Open Bar HOSPITALITY HOUR   |
| 7:00   | to 8:00       | Dinner  |

# THURSDAY, APRIL 10, 1980

9:00 am to 10:00 am SUMMARY OF WORKSHOPS

**COFFEE BREAKS** 

10:00 to 12:00 noon Open Forum for Technology Transfer Mechanisms A Primer — How To Approach Large Companies

J.F. BURKE

Control Data Worldtech, Inc.

DR. FRANK LAXAR

Bethlehem Steel Corporation

Grand Foyer

DR. J.V. LUCK General Mills, Inc.

# **FUNCTION ROOMS**

| REGISTRATION       | South Promenade  | MONDAY: 7:30 pm to 9:30 pm<br>TUESDAY: 7:30 am to 9:00 am  |
|--------------------|--|--|
| GENERAL SESSIONS   | Francis Scott Key Ballroom South   | TUESDAY: 9:00 am to 12:00 noon THURSDAY: 9:00 am to 12:00 noon   |
| Tuesday LUNCHEON   | Francis Scott Key Ballroom North   | 12:00 noon to 1:00 pm  |
| Tuesday OPEN BAR   | Lord Baltimore Hotel — Salon A & B (Please cross promenade connecting Baltimore Hilton and Lord Baltimore) | 6:00 pm to 7:00 pm   |
| Tuesday DINNER     | Lord Baltimore Hotel — Center Ballroom   | 7:00 pm to 8:00 pm   |
| Wednesday LUNCH    | Francis Scott Key Ballroom North   | 11:45 am to 12:30 pm   |
| Wednesday OPEN BAR | Grand Foyer  | 6:00 pm to 7:00 pm   |
| Wednesday DINNER   | Francis Scott Key Ballroom North   | 7:00 pm to 8:00 pm   |
| EXHIBITS           | Grand Foyer  | Exhibits will be on view from TUESDAY 9:00 am thru WEDNESDAY 5:00 pm except during lunches and dinners |

**NOTE:** All functions are in Balitmore Hilton *except* Open Bar & Dinner on Tuesday evening in Lord Baltimore Hotel across Promenade.

# **BIOGRAPHICAL NOTES**

# **Industrial Innovation Conference**

Conducted by

## AMERICAN ASSOCIATION OF SMALL RESEARCH COMPANIES

Baltimore Hilton Hotel, Baltimore, MD April 8, 9, 10, 1980

## DR. LLOYD W. BECK

Dr. Beck is Associate Director in R&D — Procter and Gamble Co., and supervises an advanced professional staff in the development and application of methods for environmental hazard assessments. These programs combine environmental chemistry and biology for the determination of effects, fates, and concentrations of consumer product chemicals that reach the environment. Aquatic biology, bioengineering, analytical and kinetic chemistry and microbiology are blended in these programs.

He has a Ph.D. in organic chemistry at Univ. of Wisconsin and before coming to P&G, served as a Research Chemist at the U.S. Naval Research Laboratory. Dr. Beck has had extensive experience in organic syntheses of compounds related to hormones and synthetic lubricants; triglyceride chemistry; surfactant chemistry; digestion, absorption, and transport of glycerides; biochemistry of skin; toxocology.

He also has supervised doctoral level professional staff (15-35) in biological research dealing with nutrition, skin, and dental problems as well as hazard assessment programs involving detergent chemicals, food additives, paper products, cosmetics, and drugs. These programs utilized histological, histochemical, metabolic, and pharmacologic methods to determine acute, subchronic and chronic effects induced by various routes and in various mammalian species.

#### **GLADYS B. BERCHTOLD**

President of Standard Laboratories, Inc., 3322 Pennsylvania Avenue, Charleston, WV.

Formerly with Carbide & Carbon Chemicals Corporation as a chemist. Standard Labs participated steadily in the growth of coal testing and the coal industry. It not only served the coal testing needs, but to a great extent served to educate the small coal producer in the principles of sampling a heterogeneous substance such as coal. Contributed to the development of ASTM standards of coal testing and analysis.

Standard Instrumentation, a research and development company was established in 1976, dedicated to improving and producing instrumentation for the coal testing business. This company has recently developed a computer system to run a coal testing laboratory and sells the only dilatometer produced in the United States. It is also developing some and refining other existing instruments in the fields of plasticity and other coal tests.

Mrs. Berchtold has published articles related to the coal industry and coal testing laboratories in trade manuals and trade publications.

She is a member of American Council of Independent Laboratories and American Chemical Society.

# DR. DONALD J. BLICKWEDE

Dr. Blickwede joined Bethlehem Steel in January 1950 as a research engineer, and was elected vice president in December 1964.

He was formerly head of the High-Temperature Alloys Branch of the Naval Research Laboratories (1948-1950), a research assistant at Massachusetts Institute of Technology (1945-1948), and a metallurgist at Curtiss-Wright Corporation (1943-1945).

Dr. Blickwede has a B.S. degree in chemical engineering from Wayne State University, a Ph.D. in metallurgy from M.I.T.

He is the author of many technical papers on transformations in steels, tool steels, steel mill processes, aluminum allcys and copper alloys. He participated in research and development activities leading to the introduction of a number of new products such as continuous galvanized sheet, single-coat enameling steel, rotor forgings, and high-strength plate steels. His department has had a number of successful developments; gage and computer control of hot strip mills, Galvalume (aluminum-zinc coated) sheet steel, continuous casting of steel for high-quality sheet products, biooxidation of coke plant waste water, and treatment of acid mine drainage from coal mines.

He is a member of the National Academy of Engineering, a fellow of the American Society for Metals which he has served as national trustee, the American Institute of Mining, Metallurgical and Petroleum Engineers, the American Iron and Steel Institute (of which he was the chairman of the Committee on General Research), the Metals Society, the Japan Institute of Metals, and the Industrial Research Institute of which he was president in 1977

Dr. Blickwede presented the Edward DeMille Campbell Invitational Lecture of the National Metal Congress in 1968, the William Park Woodside Memorial Lecture of the American Society for Metals in 1969, the Zay Jeffries Memorial Lecture of the Cleveland Chapter of that Society in 1970, and the Andrews Memorial Lecture of the Porcelain Enameling Institute in 1972.

# WILLIAM T. BROWNE, JR.

Vice President of Marketing & Sales, Marotta Scientific Controls, Inc., Boonton, New Jersey.

Mr. Browne has varied experience in marketing scientific controls for electro-hydraulic and electro-pneumatic systems; high pressure, high flow test capability; high speed flow rates; nuclear power plants; coal conversion; off-shore oil and gas; aircraft, ships, road vehicles and track vehicles.

President of MSC International. Member of the Board of Directors of General Hydraulics, Huntsville, Alabama; DeTer Co., Inc., Hanover, NJ, ECO Science, Inc., Boonton, NJ; and American Association of Small Research Companies. BSEE and IE.

#### LeEARL ANN BRYANT

LeEarl Ann Bryant is Senior Engineering Executive, Corporate Engineering Staff at Rockwell International. In this position, she is responsible for maintaining an awareness of major engineering activities throughout the Corporation in order to provide technical guidance to corporate-level executives. The assignment also involves representing the Company externally in matters pertaining to technology trends and engineering resource requirements. She was previously Manager, Engineering Services (1977-1978) and Manager, Technical Analysis (1975-1976).

A registered Professional Engineer in the state of Texas, Ms. Bryant is a 1965 graduate of Texas Technological University while working for Rockwell. Since coming to work for Rockwell in 1965, Ms. Bryant has held many technical and management positions leading to her current position.

Ms. Bryant is a member of many technical and management societies, including SWE, the National Management Association, the American Society for Engineering Education, the Institute of Electrical and Electronic Engineers, and the Texas Society of Professional Engineers. She has authored numerous articles on technical subjects, women in engineering, and management.

## JAMES F. BURKE

Mr. Burke, whose background is accounting, is President of Control Data Worldtech, Inc. and has had experience in both national and international divisions of Control Data. He was formerly with Univac Division of Sperry Rand Corporation and also Price Waterhouse Co.

He is a member of the International Club, Army/Navy Club and Licensing Executives Society. Mr. Burke was originally from Jersey City, New Jersey and holds an accounting degree from Providence College, Rhode Island.

# DR. JULIAN J. BUSSGANG

Dr. Bussgang, President of SIGNATRON, Inc., Lexington, MA, received his B.Sc. degree from the Univ. of London, M.S. in Electrical Engineering from MIT and Ph.D. in Applied Physics from Harvard University.

Following graduation he was employed first at MIT. Lincoln Laboratory and then at RCA where his last position was as Manager of Applied Research in Burlington, MA.

Dr. Bussgang served also as a Visiting Lecturer in the Division of Engineering and Applied Physics at Harvard University and as Lecturer at Northeastern University teaching special graduate courses in Communications Theory. He is a Fellow of the Institute of Electrical and Electronic Engineers.

He has a number of technical publications with five of his papers included in different books as selected reprints. He is the author of the chapter on consulting services in the MIT Press book How to Start Your Own Business.

SIGNATRON, Inc. was founded in 1962 and specializes in digital signal processing, communications and special instrumentation and software. The Company has performed projects for such major corporations as IBM, Xerox, RCA, Sperry Gyroscope, Grumman Aircraft, Raytheon and others.

# DR. SAMUEL Z. CARDON

Secretary-Treasurer of General Technical Services, Inc., Upper Darby, PA. and current President of the American Association of Small Research Companies.

Dr. Cardon worked on synthesis of organic and inorganic compounds, carcinogens in and their removal from cigarette smoke, water purification, hydrology, systems analysis in biology. In his present position, Dr. Cardon administrates and does research and development in hydrodynamics, instrument design, novel inertial sensors, systems analysis (regulation and control) in biology, general systems science, water purification and ecology, and design and construction of ground support equipment and preflight hardware for space.

# **NOEL DAVIS**

Director of Special Programs, James Ford Bell Technical Center, General Mills, Inc. Minneapolis, Minnesota.

In 1953 Mr. Davis founded Integrated Development and Manufacturing Company of Chagrin Falls, Ohio. He then joined General Mills, Inc. to complete the development of the controlled environment agriculture technology which General Mills purchased from Integrated. Mr. Davis holds a degree in Mechanical Engineering from M.I.T., holds 22 patents in areas covering machine design, lighting, air conditioning, energy management, and control systems.

### DR. J. STEPHEN DUERR

Dr. Duerr joined Structure Probe, Inc., West Chester, PA., as Technical Director in 1977 with responsibility for supervision of all materials analysis and research activities at the Metuchen, NJ laboratory.

His primary area of interest has been the characterization of materials by electron and ion microbeam techniques including transmission and scanning electron microscopy, electron probe microanalysis, and ESCA/Auger surface analysis.

His background has involved materials analysis at PhotoMetrics, Inc., nuclear plant materials at Westinghouse Bettis Atomic Power Laboratory, meteoritic and lunar materials at the Smithsonian Astrophysical Observatory, and electron beam metallography at Battelle Memorial Institute. Dr. Duerr is currently a member of a number of analytical, metallurgical, and microelectronics societies.

#### STEPHEN M. FROMNICK

Mr. Stephen M. Fromnick, Manager of Advanced Methods, Suntech, Inc., is a native of the Philadelphia area. Educated in local schools and attending Villanova University, he graduated with a degree in Electrical Engineering. During his college years, he actively participated in numerous student and curricula related committees as well as serving as president of the local chapter of the I.E.E.E. Simultaneous with his attendance, he worked for numerous architectural engineering firms as a designer and consultant.

Upon graduation, he joined B&F Instruments, Cornwell Heights, PA, where he became Product Manager, Digital Systems. Leaving in 1973, he joined Sun Company as a Staff Engineer in the Advanced Methods Section of the Advanced Management and Methods Division, Newtown Square, PA. Dealing in all aspects of instrumentation analyzers and control system design, application and installation, he presently serves as the Manager. Suntech, Inc. is a subsidiary company formed by Sun Company to provide research and engineering services to the production group, as well as providing expertise to the industry outside of Sun. Mr. Fromnick has served on the executive committee of the Philadelphia Chapter of the I.E.E.

#### DR. CHARLES A. GARBER

President, Structure Probe, Inc., West Chester, PA., formerly Research Physicist with E. I. DuPont de Nemours & Co. Specialist in Electron Microscopy applied to Materials Research. Extensive background in Chemical Engineering, Assistant Professor at Philadelphia College of Textiles and Sciences, Assistant Professor, Dept. of Metallurgical Engineering, Drexel Institute of Technology. Company specialties include Scanning Electron Microscopy, Electron Probe Analysis, Transmission Electron Microscopy, Quantitative Image Analysis and Thermal Analysis. Has published articles in numerous technical journals.

#### E.F. GLABE

Elmer F. Glabe, president of Food Technology Laboratory, an inventor and food science researcher. He is president of Food Technology, Inc., and Food Technology Products, both affiliates of Food Technology Laboratory. All three companies are headquartered in Chicago.

Mr. Glabe graduated from Illinois Institute of Technology and holds 88 U.S. and foreign patents. His discoveries and developments in food science cover a wide range of industries. One of his first patents was on use of sodium diacetate in baked foods. He is a founding member of Institute of Food Technologists and is a member of American Chemical Society, American Association of Cereal Chemists and American Society of Bakery Engineers.

He currently is chairman of the Food, Drug and Agriculture Committee of the American Council of Independent Laboratories.

#### RICHARD H. HALL

Manager, Project Planning and Analysis, James Ford Bell Technical Center, General Mills, Inc. Minneapolis, Minnesota.

Mr. Hall joined General Mills in 1959 in the Chemical R&D group and subsequently held positions in the areas of new food product R&D and consumer food market research. His current position in Project Planning involves the identification of new or emerging areas of technology in which General Mills might establish an R&D program aimed at building a new area of business for the company.

#### DR. B. DAVID HALPERN

Has degrees from M.I.T., University of Pennsylvania and Notre Dame. President of Polysciences, Inc., Warrington, PA, and Independent Polymner and Chemical Consultant.

Visiting Professor, Reproductive Biology, Hahnemann Medical College, Philadelphia, PA.

President of Polaron Instruments, Inc., Line Lexington, PA.

Director of Eastern Dental Corporation, Edison, NJ.

Formerly with Borden Chemical Company and Rohm and Haas Company.

Dr. Halpern has published dozens of technical articles in chemical areas and has about 20 patents to his credits.

He is a member of numerous professional societies and is active in a number of them.

# I.N. RENDALL HARPER, JR.

Mr. Harper is President of American Micrographics Co., a Pennsylvania company directly engaged in conversion of source documents to microform. Services include records management consulting and micropublishing.

He has a B.A., Psychology, Duquesne Univ.; B.S., Biology, Duquesne Univ.; Doctoral Program in Histochemistry, Univ. of Pittsburgh; also at IBM — 1200 hours training in data processing.

His former activities include: Instructor in Photography, Duquesne Univ.; Director, Medical Photography, Children's Hospital of Pittsburgh, Univ. of Pittsburgh; Research Associate, Department of Anatomy, Univ. of Pittsburgh; Graduate Assistantship in Histochemistry, Microbiology Department, Dental School, Univ. of Pittsburgh; Medical Marketing Representative, IBM, in charge of developing and marketing computer services in Western Pennsylvania. Directly responsible for installation of fifteen medical and biomedical computer facilities. Assigned to large scale computing systems for colleges and universities and assigned to marketing computing systems to governmental, educational and medical customers. Attained over 100% of assigned quota for each of 5 years; and District Manager, Shared Medical Systems, developed a sales and service center for SMS, a company which builds and sells information systems to hospitals.

#### **CLARKE F. HESS**

Mr. Hess has degrees from Harvard College, A.B., m.c.l. in Economics, 1958; Harvard Law School, LL.B., 1961.

Presently Account Executive, Merrill Lynch, Pierce Fenner & Smith, Inc. Regional Commodity Unit, Bala Cynwyd, PA.

Counsel, Maerz, Bresman & Detwiler, Blue Bell, PA.

He is a member of the American Bar Association (Commodities Law section); Pennsylvania and Montgomery County Bar Associations; National Lawyers Club (Washington, D.C.)

## DR. EARL H. HESS

President of Lancaster Laboratories, Inc., Lancaster, PA. Obtained his doctorate in Organic and Biochemistry at University of Illinois.

Member of Phi Beta Kappa, Phi Lambda Upsilon, Sigma XI. Member of Executive Committee and Chairman of Government Relations of American Council of Independent Laboratories; Chairman of Pennsylvania Chamber of Commerce Small Business Committee; Member of American Chemical Society, American Association for Advancement of Science; American Society for Testing & Materials, New York Academy of Sciences; Member of the Board of Directors of American Association of Small Research Companies.

# LAWRENCE LEVY

President and member of Board of Trustees of Northern Energy Corporation which operates the Northeast Solar Energy Center for the Department of Energy in the nine States of the Northeast Extensive experience in senior management, government and technical positions related to the energy, defense, space, industrial and diplomatic efforts of the United States, both domestic and international. Prior to current position, served as President of Interprise Corporation, a management consulting firm that specialized in marketing and planning services for small industries. Master's Degree in Aeronautical Engineering from MIT, served as a staff and faculty member of that University, and managed Air Force R&D Program. President of Allied Research Associates, Inc., an R&D company, for a number of years. Vice-President, Corporate Development of Raytheon Company. Served as a Presidential appointee (1961-1963), in Paris, in a two-titled capacity as Minister for Defense Affairs in the U.S. Delegation to NATO, and as Principal Representative of the Secretary of Defense in Europe, North Africa and the Middle East.

DR. JOHN V. LUCK

Senior Vice President and Technical Director, General Mills, Inc. Minne-

apolis, Minnesota.

Dr. Luck joined General Mills in 1970 as Vice President-Technical Director, and was promoted to his present position in 1976. Before joining General Mills, he was the Director of Research and Development for Durkee Foods in the Litton-Durkee division of SCM Corporation in Cleveland. Prior to joining Durkee Foods, Dr. Luck was associated with Armour & Co., General Foods Corporation and Pabst Laboratories in Institute research and Papetition. various research positions.

In 1949 Dr. Luck received a B.S. degree from Purdue University followed by a Masters degree in 1951 and PhD degree in 1953.

Dr. Luck is on the Board of Directors of the Midwest Research Institute (Northstar Laboratories) and is a member of the University of Minnesota Food Science and Nutrition Department Advisory Council. He is also an active member of the following organizations: American Oil Chemists Society, American Association for the Advancement of Science, American Medical Association (Food and Nutrition Liason Committee) Nutrition Foundation, Institute of Food Technologists and Industrial Research Institute.

## DR. LAWRENCE W. McKENNA

Larry McKenna is currently Technology Manager in the New Products Development Department of Monsanto Plastics and Resins Company. His primary responsibilities include the development of longer range, innovative plastics technology to the point of technical and business assessment. While at Monsanto Co., he has worked in various polymer-related Research and Development assignments. Much of this work involved development of products and processes in the areas of adhesives and coatings. He is a member of the American Chemical Society, the American Physical Society and the Society of Rheology.

Larry obtained his Ph.D. in Polymer Science in 1970 at the Polymer

Larry obtained his Ph.D. in Polymer Science in 1970 at the Polymer Research Institute, University of Massachusetts, following studies for a Bachelor's degree, in the combined fields of Philosophy and Chemistry. He finds that while this synergistic combination of disciplines has not led to any greater understanding of the secrets of physical processes, it has taught him a kind of benign acceptance of such well-known scientific principles as

Among numerous extracurricular activities, Larry's highest priority is sailboat racing, in which he has learned that Murphy's Law apparently applies with equal determination to all fields of human endeavor.

# DR. ARTHUR S. OBERMAYER

President and founder of Moleculon Research Corporation, Cambridge, Mass. Company specializes in the chemical and plastics field through consulting, contract research and product development. Received BA degree with high honors from Swarthmore College. Swarthmore, PA in 1952 and was awarded a Ph.D. in chemistry from MIT in 1956.

Dr. Obermayer is the founder and First Chairman of the Research Dr. Obermayer is the founder and First Chairman of the Research Management Association, President of the Association of Technical Professionals, Director of the Boston Industrial Mission. Currently Vice President of the American Association of Small Research Companies. Served as Treasurer of the Federation of American Scientist and as a Director of the Smaller Business Association of New England. Currently a member of the Congressional Office of Technology Assessment Panel on Applications of Science and Technology and the TASK Force on Appropriate Technology. ate Technology.

DR. HARRY G. PARS

President, Co-Founder and Chief Executive Officer of SISA, Incorporated, a Cambridge, MA pharmaceutical research firm; President, Co-Founder and Trustee of The John C. Sheehan Institute for Research, Inc., a Massachusetts public foundation carrying out basic research in chemistry and pharmacology; Member, Board of Directors, and Treasurer, Look, Inc., an international hospital products firm.

Dr. Pars was formerly with Arthur D. Little, Inc. as Organic Chemist and Head of Medicinal and Chemical Sciences Section, and has the following degrees: Harvard University, A.B. in Chemistry, 1953; University of Michigan, M.S. in Organic Chemistry, 1955; and University of Michigan, Ph.D. in Organic Chemistry, 1957.

He is a member of American Chemical Society; New York Academy of Sciences; American Association for the Advancement of Science; Research Management Association of Boston; American Association of Small Research Companies; Association of Smaller Businesses of New England; Consultant to the National Academy of Sciences' Committee on Problems

of Drug Dependence.

Dr. Pars' research interests, at Arthur D. Little and currently with SISA, have been directed toward the studies of an interdisciplinary group of senior scientists working in the drug field. He has been responsible for the development of clinical candidates, including central nervous system stimulants and depressants, analgesics, anti-glaucoma drugs, narcotics and narcotic antagonists. Since 1959 he has been actively engaged in studies of the chemistry, and pharmacology of maribusans, and has pignegred the the chemistry and pharmacology of marihuana, and has pioneered the development of drugs from this field. He has numerous patents and publications stemming from these interests.

His publications include Anesthesiology, June 1953; Heterocyclic Analogs of the Cannabinoids. The Therapeutic Potential of Marihuana, Plenum Medical Book Co., 1976; Therapeutic Agents Derived from the Cannabinoid Nucleus. Advances in Drug Research, Academic Press, 1977.

## DR. JERRY D. PLUNKETT

Managing Director of the Montana Energy and MHD Research and Development Institute in Butte, Montana. Duties include managing the design, construction, and testing of major experimental MHD facilities.

He was President of Materials Consultants, Inc., Denver, Colorado, specializing in the development of new products and processes and was a consultant to the U.S. Department of State in Guatemala. Developed and evaluated a program for promoting technical transfer to underdeveloped countries, and served as consultant to over twenty corporations and government agencies. Associate Professor of ceramic engineering at the University of Denver. Performed original work on the characterization of lunar surface materials, ceramic pigments, and thermal emissivity of refractory materials at high temperatures. Also established a number of successful patents and trade secrets.

His degrees include a Ph.D. in ceramics — minor in industrial management, MIT, Cambridge; M.S. and B.S. in ceramic engineering — minor in industrial management, Univ. of Missouri, Rolla.

Dr. Plunkett is a member of American Association for the Advancement of Science; American Ceramic Society; American Chemical Society; American Optical Society; American Society for Metals; Applied Spectroscopy; British Ceramic Society; International Energy Conversion Engineers; International Solar Energy Society; National Energy Resource Organization; National Institute of Ceramic Engineers; Natural Resource Defense Council.

He has received the following awards: 1978 Denver Federal Executive Board, Individual Award for Achievement in Energy Resource Development; Missouri School of Mines Silver and Gold Scholarship Award.

His publications include 25 technical reports and scientific papers.

Dr. Plunkett's new products and innovations include: a new air preheater concept for MHD electric power plants; a new exchanger concept for gas turbines; a new exchanger concept for steam automobiles; a new exchanger concept for central station electric power plants; a new ceramic heat transfer media for oil shale processing; a new charging roll for copying machines that provides up to 14 shades and printing rates of 600 feet per minute. (Present Xerox equipment is 3 or 4 shades and 10 feet per minute); and a revolutionary fuel moisture analog that will form the basis of a U.S. National Fire Danger Rating System to be introduced during the 1980's.

## RICHARD O. RASMUSSEN

President and General Manager of Space Vector Corporation, North-ridge, CA. BS degree from University of California at Berkeley in Engineer-ing. AA degree from Pasadena City College, Pasadena, CA.

Mr. Rasmussen was Director of Guidance Programs at Whittaker Corporation, Chatsworth, CA 1959-1969 and Chief Systems Engineering Assistant at Sommers Gyroscope Co., Englewood, CA, 1955-1959.

Space Vector received on February 20, 1975 Department of Defense Meritorious Award from Secretary of Defense James Schlesinger in regard to Air Mobile Feasibility Demonstration of the Advanced ICBM Technology Program.

He is author of AIAA #73-287 on ARIES, The Minuteman I Second Stage as a Controlled Sounding Rocket and AIAA #70-1407, A Digital Output Roll Stabilized Gyro Platform for Sounding Rocket Attitude Monitoring and Controls.

Member of AIAA and active in Los Angeles Chamber of Commerce.

#### HENRY E. REIF

Process Consultant, Applied Research Department, Suntech, Inc. B.S. in Chemical Engineering, Drexel University.

Mr. Reif has many years of experiences with Sun Oil Company in Program Planning and Process Development.

He is a member of American Institute of Chemical Engineers, American Chemical Society, and has published numerous articles in technical journals.

Mr. Reif holds many patents including: Catalyst for Hydrocarbon Conversions; Xylene Separation; Sulfonates for Use in Soluble Oil; High-Octane Gasoline; Improving UV Absorption of Lubricant; Hydrogenation of Lubricating Oils; and Hydrogenated Polymer Gasoline.

# DR. LOUIS SCHIFFMAN

Dr. Louis Schiffman is president of Techni Research Associates, (Willow Grove, Pa.) consulting firm that provides services in areas of technology management and technology transfer. He holds B. Ch. E., M.S. and Ph.D. (Phys. Chem.) degrees from New York University. His industrial experience includes work with Pennsylvania Grade Crude Oil Assoc., Du Pont, Atlantic Refining Co., and Amchem Prod., Inc. Dr. Schiffman is author of numerous cricics and holder of many particles in field of petroleum production. articles and holder of many patents in field of petroleum production, radiochemistry, corrosion studies, surface metal treatments, etc. He is a coauthor of section on *Metal Surface Treatments* — Encyclopedia of Chemical Technology — Kirk & Othmer — John Wiley Pub. Dr. Schiffman is a member of several honorary and professional societies including, Sigma Xi, Phi Lambda Upsilon, American Inst. Chem.. N.Y. Academy of Sciences, Licensing Exec. Soc.

### PETER A. SEARS

Director, Corporation Development, of SmithKline Corporation. He is responsible for the Corporation's acquisition planning.

Mr. Sears joined SmithKline in 1963, as an attorney in the Law Department. He was appointed Assistant General Counsel and Assistant Secretary in 1971, and General Manager for SmithKline operations in Japan in 1973. He was Vice President and Area Director, Canada & Asia/Pacific for Menley & James Laboratories-International from October, 1975 until his appointment as Director, Corporate Development in November, 1977.

Born in Cleveland, Ohio on October 28, 1938, Mr. Sears is a graduate of Colgate University and he received his law degree from Harvard Law School in 1963.

He is a member of the American and Philadelphia Bar Associations, and the Japan Society, a New York based organization interested in furthering relations between Japan and the United States.

#### DR. A.L. SHRIER

Dr. Shrier has degrees in Chemical Engineering (B.S., M.S., Ph.D.) and Law.

He is President, Solar Thermal Systems, a Division of Exxon Enterprises,

Solar Thermal Systems is engaged in the development, manufacture and sale of solar systems for heating and cooling buildings, heating providing industrial process heat.

Dr. Shrier has had fifteen years experience with Exxon in a series of technical, staff and management positions: research engineer and supervisor of an engineering research and consulting unit: involved in process development, equipment design, systems analysis and troubleshooting; chemicals, oil gas, coal, synthetic fuels, and nuclear fuels; head of pioneering research group; innovation-oriented R&D in pollution control and biomedical engineering; coordinator of pollution abatement for worldwide tanker fleet; development and implementation of techniques for the design and operation of tankers to minimize pollution of the marine environment, formulation of national and international regulations to control pollution from ships; progam manager —new energy ventures; manager — solar energy ventures; directed study of alcohol as new synthetic fuel; established and managed ventures in solar photovoltaics and solar heating and cooling; currently chief executive officer of separate business line.

#### DR. JOSEPH A. STERN

Dr. Stern holds the following degrees from M.I.T.: S.B., S.M., and Ph.D.

Dr. Stern is President of and is chief executive officer of the Bionetics Corporation.

He was formerly with Jet Propulsion Laboratory — Sterilization, Environmental Requirements Section, Project Engineering Division.

The Boeing Company as Advanced Interplanetary Exploration Systems Manager, Also program manager, NASA (Houston), Study of Interplanetary Mission Support Requirements; and Manager, Advanced Lunar Orbiter Mission Studies.

Dr. Stern was a consultant for Charles Pfizer and Company, Grace Chemical Company, Alaska Packers Association and American Maize

He was also a teaching and research assistant for Department of Modern Technology, M.I.T.

Dr. Stern has published over 50 technical articles during his career, including two encyclopedia articles. He is a Fellow of the American Association for the Advancement of Science, a member of the New York Academy of Sciences and the professional honorary societies, Sigma Xi and Phi Lambda Upsilon.

#### HARRY T. SUTHERLIN

Supervisor, Energy Studies Group, Bethlehem Steel Corporation, Bethlehem, PA.

Mr. Sutherlin has extensive experience in energy utilization and energy production for use in steel mills. He joined Bethlehem Steel in 1963. From 1965 thru 1979 he has been Supervisor of the Process Evaluation Group.

Mr. Sutherlin has participated in technical and economic evaluations of new processes, studies on energy utilization in the steel mills, technological new processes, studies on energy utilization in the steel mills, technological forecasting of energy production and use with preliminary assessments for Bethlehem Steel and comparative studies of coal conversion processes. From 1974 to 1976, he was a member of the AISI Task Force which studied the potential application of nuclear energy in steelmaking. Currently as Supervisor of the Energy Studies Group, his group conducts preliminary engineering-economic studies of energy conversion processes or energy conservation proposals and coordinates the various energy related research Department. search Department.

Prior to coming to Bethlehem Steel, Mr. Sutherlin was with Esso Research and Engineering Company where his main activities were field test work on refinery equipment and the process design of petroleum refining and chemical products processes.

He received his B.S. degree in Chemical Engineering from Purdue University.

#### JOSEPH W. SELDEN

Received his B.S. in Industrial Engineering from Pennsylvania State University. He has been active in new product development since 1940 in most phases of this activity ranging from junior engineer to president. A few of the better known products he has helped to launch are Thermo-Fax, Pliolite, Scotchgard, and Tartan Turf. Presently he is an independent consultant specializing in the selection, evaluation, and commercialization of new products. For enjoyment, he teaches a class in his favorite subject in the School of Business Administration at the University of Tulsa.

#### RICHARD K. SUTZ

Since February of 1978, Mr. Sutz has functioned as a founder and President of Wind Baron Corporation. Mr. Sutz is also a partner in EMC Associates, a firm offering energy and marketing consultation services. For 2½ years prior to founding Wind Baron Corporation, Mr. Sutz was employed by the United States Department of Energy as Chief of Energy-Related Inventions. At the request of the Department of Energy, Mr. Sutz established this new program which provides management consultation and research and development funds to individual inventors and small businesses involved in the commercialization of energy-related inventions. For 3 years prior thereto Mr. Sutz was Assistant Director of the State of Arizona Energy Office, where he had primary responsibility for the establishment and implementation of the Arizona Energy Policy related to the state's research and development efforts in energy-related technology and was also responsible for the development of a statewide policy regarding conservation and utilization of alternative forms of energy. For approximately 12 years prior thereto, Mr. Sutz was involved as a principal in his own business specializing in the commercialization of new product ideas and the formation of new business ventures related thereto. For 3 years previously, Mr. Sutz was employed by Grumman Aerospace Corporation as Assistant Director for Europe and the Middle East. For 3 years prior thereto, he served in the United States Navy as Senior Project Officer for the development of safety equipment for airplane pilots. Mr. Sutz holds over 30 United States patents and numerous foreign patents. He holds a Bachelor of Science Degree in Metalurgical Engineering, with a minor in Mechanical Engineering, received from the Illinois Institute of Technology, as well as a Masters Degree in International Business and Finance from I.M.E.D.E. (Harvard Business School Lausanne, Switzerland).

#### DR. RICHARD L. WASSON

Dr. Wasson is manager, Technology Planning, Monsanto Industrial Chemicals Company, and is currently managing technical support sections for Monsanto Industrial Chemicals Research Departments, including analytical, environmental and engineering research programs; evaluation of Industrial Chemicals technical programs and forecast of future technical

His degrees include a B.S. in Chem., U. of Illinois; and Ph.D. in Org. Chem., MIT.

Dr. Wasson has had many years of experience in organic and physical chemistry of industrial organic chemicals, natural product chemistry, flavor/fragrance product development, organic chemical process development and plant demonstration, new product research and market development, technology forecasting and new business evaluation.

His publications include fifteen papers and patents on organic reaction mechanisms and flavor chemistry.

#### ROBERT E. WESSLUND

Mr. Wesslund is Vice President of Technology Exchange at Control Data Corporation. In this position he has been involved in programs to gather, inventory, and manage the movement of technology within Control Data Corporation. He has worked with the Academic Community to move technology from the University to industry. He has also been involved with exchanging technology with the Eastern Countries and developing countries.

He was formerly with Engineering Research Associates of St. Paul, Minn. as a design engineer engaged in Communication Development and Computer Development, and continued with Univac which acquired ERA, till 1959. He joined Transistor Electronics in 1959 as Vice President of Engineering.

He holds a BS degree in Electrical Engineering from the University of Nebraska and has two patents relating to the electron and computer industry and is a member of the University of Minnesota Institute Advisory

#### DR. DONALD E. WOODMANSEE

Dr. Woodmansee is liaison scientist at the General Electric Research and Development Center, Schenectady, New York and advises the Center of the technical needs of the company's Power Systems Sector and, in turn, evaluates the Center's programs for application to various Sector projects.

Dr. Woodmansee received his bachelor's degree in chemical engineering from the University of Delaware and his master's degree and Ph.D. in the same discipline from the University of Illinois.

He joined the Center in 1967 as a chemical engineer, conducted research on nuclear reactor water chemistry, and then studied heavy fuels combustion and heat transfer in heat recovery steam generators.

He directed the Center's effort to develop a coal gasifier for gas turbine combined cycles, and in 1977 the GEGAS-D Gasifier, built and operated under his direction, received an I-R 100 Award from Industrial Research Magazine as one of the most significant new technical innovations of the prior year. Most recently he has managed the Center's newly formed Coal Science Program Science Program.

Dr. Woodmansee is a member of the American Institute of Chemical Engineers, is author or co-author of 14 technical papers and publications, and has five patents.

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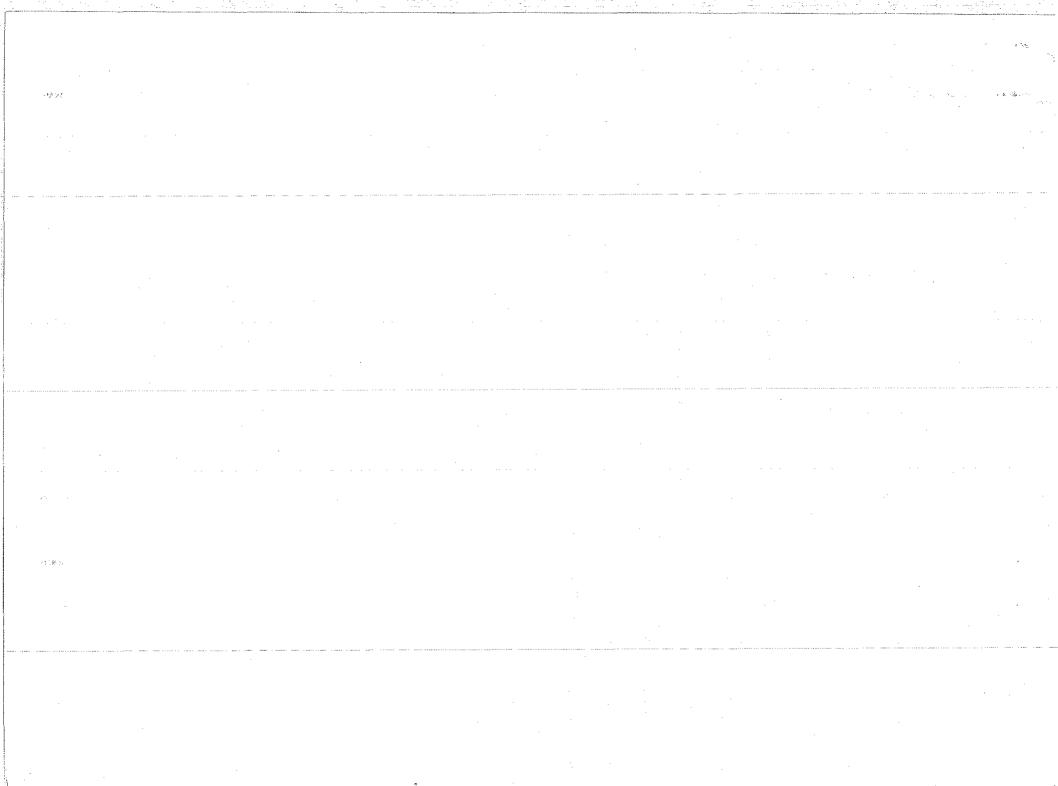
# WORKSHOP SCHEDULE

| #  | Name of Workshop  | Date                 | Lobby<br>Edgar Poe Room | Lobby<br>Carrollton Room   | Cabana Level<br>Preston Room | Cabana Level<br>McKeldin Room | Cabana Level<br>Schaefer Room |
|----|---|----------------------|-------------------------|----------------------------|------------------------------|-------------------------------|-------------------------------|
| 1  | Environmental Services<br>(Analytical, Pollution Control,<br>By-Product Utilization)                      | Tuesday<br>April 8   | :                       |                            |                              | Tuesday<br>3:00 to 5:00       |                               |
| 2  | Food Products<br>(Production, Processing)   | Tuesday<br>April 8   | 7-1                     |                            |                              | Tuesday<br>1:00 to 3:00       |                               |
| 3  | Information Science<br>(Computer Science, Information<br>Systems, Data Processing)                        | Tuesday<br>April 8   |                         |                            |                              |                               | Tuesday<br>3:00 to 5:00       |
| 4  | Biomedical<br>(Pharmaceutical, Instrumentation,<br>Test Systems, Special Devices)                         | Wednesday<br>April 9 |                         |                            |                              |                               | Wednesday<br>9:00 to 11:00    |
| 5  | Aerospace   | Wednesday<br>April 9 | :                       |                            |                              | Wednesday<br>9:00 to 11:00    |                               |
| 6  | Instrumentation/Electronics<br>(Analytical, Measurement,<br>Control, Remote Sensing)                      | Tuesday<br>April 8   | Tuesday<br>1:00 to 3:00 |                            |                              |                               |                               |
| 7  | Energy/Fossil Hydrocarbons\<br>(Petroleum, Shale, Tar Sands\<br>Production & Processing)                  | Tuesday<br>April 8   | Tuesday<br>3:00 to 5:00 |                            |                              |                               |                               |
| 8  | Energy/Coal<br>(Mining, Analysis, Sulphur<br>Removal, Processing, Conversion)                             | Tuesday<br>April 8   |                         |                            |                              |                               | Tuesday<br>1:00 to 3:00       |
| 9  | Energy/Alternatives except Solar<br>(Biomass, Wind, Nuclear, Ocean,<br>Geothermal, Gasohol, Heat Engines) | Wednesday<br>April 9 |                         | Wednesday<br>9:00 to 11:00 |                              |                               | ·                             |
| 10 | Energy/Solar<br>(Active Systems, Passive Systems)   | Wednesday<br>April 9 |                         |                            |                              |                               | Wednesday<br>1:00 to 3:00     |
| 11 | Energy/Conservation & Storage<br>(Energy Saving Systems, Energy<br>Storage Systems)                       | Tuesday<br>April 8   | ::                      |                            | Tuesday<br>3:00 to 5:00      |                               |                               |
| 12 | Materials/Metals<br>(Ferrous, Non Ferrous,<br>Production, Fabrication, Protection)                        | Wednesday<br>April 9 |                         |                            |                              | Wednesday<br>1:00 to 3:00     |                               |
| 13 | Materials/Plastics<br>(Packaging, Processing<br>Equipment, Applications)                                  | Tuesday<br>April 8   |                         |                            | Tuesday<br>1:00 to 3:00      |                               |                               |
| 14 | Materials/Chemicals<br>(Custom Syntheses, Chemical<br>Processing, Formulation)                            | Wednesday<br>April 9 |                         | Wednesday<br>1:00 to 3:00  | ·                            |                               |                               |

# Association Small Business Programs

The Business Association Handbook of Small Business Membership Services Prepared by the Office of Advocacy

January 1981 **U.S. Small Business Administration**Office of Advocacy



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# **Dear Business Organization Executive:**

A growing number of trade associations, chambers of commerce and other business membership groups have found that special association programs tailored to the interests and needs of their small business members are helping their organizations as a whole, as well as their small business constituents.

Recognizing the importance of small businesses in their own associations and in the U.S. economy, many business groups have launched programs and services responding to the day-to-day needs of smaller firms. They have found that a well-run small business program benefits the entire organization--by providing valuable services to members, and by offering useful programs that attract new members. The small business member-firms benefit by getting services--such as legislative and technical information--that they couldn't afford on their own; and they find that they have greater clout on public policy questions if they work together.

In our contracts with business associations, the Office of Advocacy has learned of many valuable activities and services which business groups are offering to their members. We've also found that some organizations are unaware of programs that others have found successful, which might be helpful to their own members.

This booklet is an effort to share ideas--ideas collected from business groups themselves--as to how business associations can better serve their small bisiness members. Examples of successful programs and services have been drawn from talks with association leaders and members and from business-group publications.

We hope you will find new ideas here that you can adapt for your own group's use-but obviously, this booklet is not the last word on the subject. We want to hear more from the business organizations themselves about small business programs which have been useful: how they worked, why they were successful, what pitfalls should be avoided. Your suggestions for new approaches can be incorporated in later editions of this handbook.

The office of Advocacy's mission is to promote the interests of small business in the American economy and within the councils of government. We hope you will share your successes and your advice with other business groups.

# 1. Services and Activities

Services provided by associations to their members tend to fall into three categories: publications; conventions, conferences, and seminars; and consulting and research.

#### **Publications**

Associations publish a variety of materials including:

- 1. Membership directories;
- 2. General interest newsletters and magazines;
- 3. Legislative, technical, and professional journals;
- 4. Legislative and technical bulletins;
- 5. Handbooks and manuals;
- 6. Digests of laws and regulations;
- 7. Directories of suppliers and buyers.

In addition, the SBA Survey identified a number of innovative attempts to meet members' needs.

# **Advice on Cash Management**

Alarmed at the precarious cash flow position of some of its members, a retailing association developed a newsletter with instructions on how small businesses can establish a cash flow plan. The newsletter recommended specific cash management practices for the timing of creditor payments, the disposition of cash, and the use of short-term financial instruments. More generally, association publications are able to survey academic and professional journals and interview industry experts to bring new management ideas to their small business members.

# **Alternative Product Lines**

One approach that companies have taken to weather a recession is to modify their lines of products and services. Recently, a few trade association publications have offered advice on new lines of business open to their members; for example, an engineering contractors' association, worried about layoffs in the construction industry, published three bulletins on new business possibilities in energy conservation management.

## **Overseas Marketing Opportunities**

Small businesses often find an international marketing staff beyond their financial grasp. One pharmaceutical manufacturers' association has remedied this in part by publishing lists of overseas marketing opportunities.

## Tips on the Law

Small businesses are often poorly equipped to avoid the legal snares of state and local regulatory authorities. Several trade associations are providing advice on ways to avoid problems with the law. For example, an association of junkyard dealers has published bulletins instructing its members how to avoid zoning problems and how to win local zoning disputes.

#### **Legislative Tracking Charts**

Recognizing the often prohibitive cost of Washington legal counsel for the small businessperson, an increasing number of associations publish alerts on pending congressional legislation. An Eastern association, for example, encloses a "legislative scorecard" in each of its monthly newsletters. The scorecard lists the titles and sponsors of proposed bills and summarizes their effects on small business.

# **Technology Updates**

Among the more serious problems faced by small businesses is the difficulty of keeping up with technological change. A national feed association addressed the problem of equipment obsolescence by publishing a 574-page directory of feed equipment available on the market. The book is updated regularly.

#### Conventions, Conferences, and Seminars

Over the last decade, trade association meetings have moved considerably beyond being primarily social gettogethers. Convention agendas have become more serious, being expanded to include: briefings, weekend seminars, breakfast workshops, regional meetings, roundtable discussions, monthly clinics, and special topic presentations.

Meeting content has focused increasingly on the art of small business management. A sampling of topics from recent meetings includes the design and implementation of small business marketing strategies, the use of market research to solve marketing problems, new systems of worker motivation, and alternatives for small business financing.

#### Seminars Co-Sponsored with Universities

Some chambers of commerce and local colleges and universities have cooperatively sponsored seminars which place the knowledge of successful business executives and academic experts at the disposal of small business entrepreneurs. For example, a technical college and an Ohio small business council have co-sponsored a monthly seminar on creative problem-solving and ways to improve productivity. The seminar has won district and regional awards for its contribution to small business management practices.

# **Advanced Management Courses**

Some measure of the seriousness of recent business organization meetings is found in the professional level of the courses they offer. A Texas small business council, for example, is sponsoring a 12-session program that covers personnel management, marketing research, tax planning, bookkeeping and accounting, employee recruiting and hiring, purchasing, inventory control, public relations, and forecasting.

# **Future-Oriented Briefings**

To keep pace with research, development, and design, small business owners often require the help of outside professionals. At a recent convention, a national furniture manufacturing association recruited design students to present sketches of the furniture which members would most likely be manufacturing and marketing in the future.

# **Minicomputer Orientation**

Technological advances have put the price of minicomputers within range of thousands of small businesses. A small business council in New York helped promote the use of computer technology by sponsoring a minicomputer seminar with a "Big Eight" accounting firm. During the seminar, business executives learned how to assess the cost-effectiveness of minicomputers and how to select equipment best suited to their requirements.

#### **Traveling Seminars**

Associations can get "more bang for for the buck" by offering similiar programs in several locations. With the first warning of the 1980 recession, a construction association organized a course on "Recession Strategies: How to Make Money and How to Keep It in Hard Times"; within three weeks, the course was offered in Cleveland, Newark, Denver, and Dallas.

#### **Consulting and Research Services**

In the spring of 1980, Boston's leading business consulting firm offered starting salaries of \$45,000 per year and billed clients a minimum rate of \$140 per hour. Similarly, New York's top law firm offered starting salaries of \$36,000 per year and billed clients more than \$100 per hour. The high costs of management and legal counsel are often far beyond the means of small businesses. As a result, a growing number of trade associations offer counseling and financial analysis services. Services include:

- —Informing members of free professional consulting services:
- -Operating consulting hot lines;
- —Conducting employee training programs and aptitude tests;
- -Providing members with job evaluation plans and incentive plans;
- Advising members on employee relations and labormanagement disputes;
- -Advising members of accounting strategies;
- Providing members with an executive referral and personnel placement service;
- -Maintaining a library for member use.

#### Staff Consultants

A number of aggressive trade associations have developed their own professional consulting staff available to the membership for counseling on both general management problems and problems peculiar to small business. A retail clothing association retained a personnel consultant to advise members on the sensitive problems which family-run businesses may encounter.

## **Consultant Hotlines**

Some chambers of commerce are providing the small business community with phone business advice. The chamber in Kansas City, Missouri, has a telephone referral service with volunteers skilled in every aspect of business management on call to assist small business entrepreneurs.

# **Shared-Cost Legal Counsel**

Experienced legal departments often give large corporations an important advantage. One association is providing a comparable advantage to its small business members by offering shared-cost legal counseling focused on labor law and labor-management relations.

## **Group Insurance**

In certain industries high insurance premiums put small businesses at a competitive disadvantage. A regional association of small importers and exporters has reduced the cost of shipping by initiating a group insurance plan. Under the plan, subscribing members are treated as a single company and offered a reduced rate. The plan has placed overseas trade within the reach of many more small companies.

## **Bank Loan Negotiations**

The tight money market has caused severe problems for small firms seeking to maintain or enlarge their operations. The credit crunch is complicated by the reluctance of many loan officers to risk capital on less established ventures. The small business council of one national association has established a special financial task force to negotiate with lending institutions for lower interest rates and a larger number of loans to its members.

#### **Business Libraries**

Small business executives often find it difficult to keep informed on developments in their industries. Some associations assist members by maintaining a business library which includes data on economic trends, survey findings, marketing and finance texts, lists of new business opportunities, and recent industry studies.

# **Referral to Free Consulting Services**

Associations may supplement their own consulting services by informing their small business members of free counseling programs. The SBA offers three programs to assist small business.

Small Business Administration Field Offices—Through field offices in approximately 100 cities, the SBA provides executives with recommendations on Federal government contract procurement.

SCORE (Service Corps of Retired Executives)—SCORE consultants are retired business executives willing to provide free management counseling to small businesses.

ACE (Active Corps of Executives)—ACE consultants are active business executives who volunteer free time to counsel small businesses.

# 2. Government Relations

Government spending, programs, legislation, and regulation directly affect the day-to-day conduct of virtually every small business. As a result, industry groups are spending more time and effort representing their members' interests at every level of government. Major activities include:

Securing research grants, contracts, and government loans for association members;

Monitoring and advocacy of government legislation and regulations;

Developing standards for industry self-regulation.

#### Grants, Contracts, and Loans

The Federal procurement budget for fiscal year 1980 was more than \$99 billion. Small business, however, received only 22.2 percent of this, and only 3.5 percent of Federal research and development grants. Several associations and chambers of commerce are working to increase the share of Federal and state funds going to their members. Their efforts include:

Establishing small business financial task forces;

Publishing government contracting opportunities;

Providing Federal agencies with information about members' capabilities;

Advocating an increased share of government contracts for small business.

Trade associations have reported several successful approaches:

# **Government Contracting Fairs**

Small businesses often fail to secure government contracts because they are unaware of opportunities or are unfamiliar with bidding procedures. To remedy these problems, one small business council holds an annual procurement trade fair, where small business owners can meet with government officials to learn of current government contracting activity and to be briefed on bidding procedures.

SBA field offices are listed in the Appendix.

#### **Promoting an Equitable Share of Contracts**

Chambers of commerce and associations have begun to assist small businesses in capturing a larger share of government work. The small business advisory department of a Midwestern chamber has initiated a "set-aside" program to urge county governments to earmark 25 percent of their contracts and purchases for small and minority firms.

#### **Enrolling Members in SBA's Procurement Data Bank**

SBA's Procurement Automated Source System (PASS) helps small businesses win government contracts by compiling information on their capabilities. Government contracting offices frequently consult the data base in selecting contractors. Associations can advise their members to request a data bank application by contacting their local SBA office or writing:

Small Business Administration Office of Procurement and Technical Assistance Room 630 1441 L Street, NW Washington, DC 20416 202/653-6938

#### **Enrolling Members on Bidder Mailing Lists**

Most Federal and State agencies maintain lists of businesses interested in current information on contract requirements. To include their members on bidders' mailing lists, associations should contact the procurement divisions of agencies that purchase the goods or services of their industries.

#### Monitoring and Advocacy

Approximately 5500 registered lobbyists currently represent the private sector before the Congress. However, the high cost of Washington representation forces most small firms to rely on their trade association or chamber staffs to monitor Federal activities and represent their interests. Most trade associations:

Report legislative and regulatory developments to their memberships;

Report on Executive Branch policy developments and publications of interest to the membership;

Testify before and/or submit written statements to legislative and regulatory bodies;

Retain legal counsel to advise the membership and to assist members in appearances in legislative and regulatory proceedings.

A 1979 Office of Advocacy publication, "The Regulatory and Paperwork Maze - A Guide for Association Executives," recommends several steps that business groups should follow in preparing themselves or their members to testify before congressional or regulatory bodies:

Contact the committee, subcommittee, or agency holding the hearing to request time on the agenda and to pin down the exact time, place, and deadline for submitting statements;

Retain legal counsel to assist small business executives who will testify on complex bills and regulations;

Assist members in preparing visual aides to support their testimony and help them prepare statements and summaries for press releases;

Prepare for the benefit of all members a handbook on procedures for testifying.

# Legislative Search

Organizations can introduce their members to the most comprehensive and least expensive legislative search service available to business groups. The Bill Status Office of the U. S. Congress maintains a computerized file on more than 80,000 bills introduced in recent sessions. Trade associations or their members can telephone the Bill Status Office to request a computer search for legislation on any topic affecting industry. The Office provides at no cost a print-out identifying relevant bills and their sponsors and describing their contents. Telephone 202/224-3121.

#### **Government Publications**

Many associations and chambers regularly monitor Federal publications for developments on policies and programs and other useful information. For example, a major retailing association recently called members' attention to a Department of Justice publication on methods to prevent shoplifting. Associations may subscribe to a free monthly list of Selected U. S. Government Publications for new or still popular publications; for a fee, they can receive the Monthly Catalog of U. S. Government Publications, a comprehensive listing of all publications issued by Federal departments and agencies. To subscribe to either of these services, contact:

Superintendent of Documents Washington, D. C. 20402 202/275-2051

Catalogs of technical research publications are available from:

U.S. Department of Commerce National Technical Information Service 5285 Port Royal Road Springfield, VA 22161 703/557-4600

# Regulation

In recent years, Federal regulatory agencies have been more receptive to voluntary self-regulation as an alternative to government-imposed controls. When self-regulation has proved acceptable, trade associations have found methods to reduce the costs of compliance.

Trade association efforts to reduce the burden and costs of regulatory compliance have focused on:

Standardizing products throughout an industry;

Establishing industry grading and quality standards;

Developing industry safety and health requirements;

Implementing product testing services for members.

The Office of Advocacy has pressed successfully for a system of regulation "tiering" in which the smallest firms are exempted from certain requirements.

## **Proposing Self-Regulation**

Concerned about the flammability of upholstered furniture, the Consumer Product Safety Commission had considered imposing mandatory product regulations on the furniture industry. The manufacturers association, however, proposed a system of self-regulation. In a major victory for the association and its members, the Commission voted to defer imposition of Federal regulations for one year to allow the industry proposal to be tried. An association executive estimates that the voluntary program will save industry manufacturers \$1.2 billion.

#### **Reducing Costs of Compliance**

Some associations have worked successfully with the government to reduce the costs of compliance. For example, a national plywood manufacturers association won the right to offer the fire and smoke testing required by the government to its members. The association's testing service is provided at a fraction of the price charged by other organizations.

# Occupational Safety and Health Administration Compliance Committees

Complying with OSHA standards can be a major expense even for businesses with few employees. One contracting association has tried to minimize this expense by establishing an industry safety committee to develop OSHA training and educational materials. The first savings were realized when OSHA agreed to fund the writing and publishing of the materials.

# 3. Coalitions and Campaigns

In recent years, business groups have sought to increase their effectiveness by forming coalitions to work together toward:

Influencing state and Federal legislation and regulations:

Encouraging inter-industry standardization in certain technical practices;

Establishing uniform industry standards in safety and health.

A sampling of ways in which associations have worked together is offered below.

# **Single-Goal Coalitions**

One of the more remarkable legislative victories for small business occurred in 1976 when a coalition of small business associations challenged a proposal to combine the Senate Small Business Committee with the Agriculture Committee. The effect would have been to submerge small business interests and certain small business clout in the Senate. As a direct result of coalition efforts, the proposal was defeated. Again in 1976, the largest coalition of trade associations and business groups in recent history worked successfully to win a presidential veto of the common situs picketing legisla-

tion, a controversial proposal on labor-management relations. A coalition campaign included the mailing of 500,000 postcards to the White House.

# **Inter-Industry Coalitions**

Associations within the same industry often share similar interests and can benefit by combining resources. Member of the furniture industry had a common interest in trucking deregulation. By working together, they were able to develop a consensus and present a unified front to regulatory authorities. Their actions helped secure passage of major trucking deregulation legislation which substantially reduced members' shipping costs.

#### **Regional Coalitions**

Associations within the same region can also benefit from team effort. A coalition of Pennsylvania associations helped pass state legislation eliminating the prepayment of corporate taxes. The coalition was able to secure a tax change that individual associations had been unable to win.

# **Annual Small Business Campaigns**

Recognizing the power of team lobbying, several business associations organized a permanent coalition to present the view of small business. The Coalition of Small and Independent Business Associations (COSIBA) sponsors an annual campaign to advance small business.

# 4. Outreach to the Public

Business organizations engage in a range of activities which increase the visibility of small business and help enhance its general reputation. Within recent years, associations and chambers have adopted more sophisticated methods of communication with the communities in which they work. These include:

Publishing industry fact booklets;

Presenting industry products to the public through expositions, trade shows, and traveling exhibits;

Establishing speakers' bureaus;

Maintaining a reference library;

Writing articles for trade publications and local papers;

Offering career manuals and career counseling on entrepreneurship to high school and college students;

Supporting industry public relations drives;

Establishing educational scholarship programs.

Despite its potential for good community relations, communication with the public is neglected by many associations. The following pages offer examples of practices designed to improve the public's understanding of small business.

#### Free Goods and Services

One of the most effective methods of winning public support for a small business is to offer free goods or services. One construction association, for example, has designed do-it-yourself manuals which give helpful hints on home carpentry.

#### Scholarship Contests

Trade associations can reach out to young people by sponsoring scholarships, contests, and speakers' bureaus. An automotive association has established a scholarship contest which offers two \$750 grants to graduate students who have completed excellent research in automotive retailing. The program not only familiarizes young people with the industry but also conveys the research results to its members.

#### Small Business Week

Participation in Small Business Week reminds the public of the importance of small business. Small Business Week is declared by the President of the United States as a period of national recognition for the small business community. The Small Business Administration encourages local associations to participate in Small Business Week in a variety of ways. These include:

Dramatizing small business accomplishments through local exhibits and award programs;

Organizing open houses to encourage small business participation in association activities;

Organizing town meetings to encourage discussion of relevant small business issues:

Organizing congressional briefings at the local, state, and Federal levels.

# 5. Advocacy Councils

Most of the ideas thus far listed are intended to serve primarily the interests of small business but over time they may lose that special focus. One way of avoiding this is the small business advocacy council, a committee of business and community leaders organized within a trade association or chamber of commerce whose primary purpose is the representation of small business members.

A recent U. S. Chamber of Commerce survey of local and regional members shows that in 1974 almost no special chamber committees were organized on behalf of small business. By 1977, however, more than 900 chambers expressed an active interest in their small business members, and more than 300 had organized special councils to advance their interests.

A small business advocacy council can serve at least two important purposes. First, it can monitor an association's or chamber's publications, meetings, and consulting services to ensure that they meet the needs of small business members. Second, the council can represent the small business membership before legislative and regulatory bodies of Federal, state, and local governments.

The following suggestions for organizing an advocacy council are based on the experience of those already in action.

#### Starting an Advocacy Council

Step 1: Audit Internal Services and Activities

Before establishing a small business advocacy council, an organization should review activities to determine how well the interests of small business are represented. In particular, the organization should ask:

How many small businesses are included in the organization's membership?

How many small business executives are on the organization's board of directors?

How many of the organization's publications are useful for a small business executive?

How many of the organization's programs are directed to the interests of small business?

#### Step 2: Capitalize on Existing Activities

Before launching special activities for small business members, it may be easier to expand existing programs. For example, the U. S. Chamber of Commerce recommends that its local chambers expand one-time seminars, educational series, or research reports into regularly scheduled events. Participants in the initial program can be used to organize the advocacy council and its activities.

#### Step 3: Recruit Business Leaders

After deciding to establish an advocacy council, organization officials should identify and recruit leaders from the small business community to direct the council's early marketing and program efforts. In some cases, this may first require general membership recruiting.

# Step 4: Establish Objectives

After advocacy council leaders and members have been selected, the participants should establish major goals for the year. These goals should provide some direction to subcommittees in planning their activities.

# Step 5: Recruit Community Leaders

When an organization's by-laws permit participation by nonmembers, it may be useful to identify community leaders whose support would be most beneficial to small business. For example, a trade association concerned over proposed municipal taxes may want to appoint local tax attorneys and accountants to the management of the advocacy council.

#### Step 6: Establish Essential Subcommittees

Most often, subcommittees are helpful in carrying out an advocacy council's functions. Suggestions for subcommittees include:

An Administrative Committee responsible for membership relations, the council budget, and program coordination.

A Communications Committee responsible for developing publications and programs to present the position of small business to the community.

A Government Affairs Committee responsible for identifying legislation and regulations of possible interest to small business and for planning any activities that may be required. More generally, the government affairs committee serves as a liaison between small business members and government.

A Programs and Services Committee responsible for developing meetings, educational courses, and publications for small business. In addition, the committee monitors the activities of the parent organization to ensure that the special needs of small business are being met.

# Helpful Books and Publications

The following books, articles, and pamphlets contain helpful information on services offered by trade associations and chambers of commerce.

#### Books

Bradley, J. H., The Role of Trade Associations and Professional Business Societies in America, University Park, Pennsylvania, 1965.

Mitchell, Jr., How to Use Your Trade Association, New York, New York, 1951.

#### Articles

Consumerism: How Associations are Meeting a Bold New Challenge, Association Management, May, 1968, pp. 30-37.

Distelhorst, G. F., The Value of Association Membership, NBFAA Signal, First Quarter, 1973, pp. 22-23.

Doyle, M. B., The Role of Voluntary Associations in a Free Society, Association Management, April, 1979, pp. 49-52.

Goldsmith, S. L., Why Belong to a Trade Association? Glass Digest, October, 1971, pp. 2-4.

Martin, J. G., The Value of the Association at Dues-Paying Time, Association Management, October, 1971.

Mortensen, C. M., Key Factors in Industrial Progress, Trade Association Department, Chamber of Commerce of the United States of America.

Schafer, C. L., Responding to the New Breed of Association Members, Association Management, April, 1980, pp. 31-35.

Stratton, D. J., How Associations Influence Public Policy, Leadership, March, 1980, pp. 27-31.

Trade Associations: Are the Benefits of Membership Worth the Costs? Trend, Volume 3, Number 2, 1977, pp.9-11.

The Volunteer in Our Society, the Royal Bank of Canada Monthly Letter, June, 1976, pp. 1-4

Watson, J. H. III, Company Membership in Associations, The Conference Board Record, January, 1966, pp. 50-56.

#### **Pamphlets**

Center for Small Business, Chamber of Commerce of the United States of America, Opportunities-The Small Business Newsletter, Washington, D.C., published bi-monthly.

The Council of Small Business, Chamber of Commerce of the United States of America, How to Involve and Serve Small Business Through Your Chamber of Commerce, Washington, D. C., 1977.

The Council of Small Business, Chamber of Commerce of the United States of America, Small Business Gets It All Together, a slide presentation, Washington, D. C.

National Association of Securities Dealers Inc., Special Report - Small Business Financing: The Current Environment and Suggestions for Improvement, Washington, D. C., 1979.

Price Waterhouse and Company, Getting Your Point Across in Washington, New York, New York, 1980.

Small Business Washington Presentation, 1979 Small Business Washington Presentation: Small Business Builds America's Strength, Washington, D. C., 1980.

Small Business Washington Presentation, Small Business: Challenge to the 1980s, Washington, D. C., 1980.

United States Small Business Administration, Management Aid 224, Association Services for Small Businesses, Washington, D.C., 1979.

United States Small Business Administration, Office of the Chief Counsel for Advocacy, The Regulatory and Paperwork Maze: A Guide for Association Executives, Washington, D. C., 1979

United States Small Business Administration, Office of the Chief Counsel for Advocacy, Small Business Everybody's Business: A Primer for Trade Associations and Their Members, Washington, D. C., 1980.

White House Commission on Small Business, Report to the President, America's Small Business Economy - Agenda for Action, Washington, D. C., 1980.

# **SBA Field Office Addresses**

New England (Region 1)

Massachusetts 02114, 150 Causeway Street. 617/223-2100 Massachusetts 01050, 302 High Street, 413/536-8870 Maine 04330, 40 Western Avenue, Room 512, 207/622-6171 New Hampshiure 03301, 55 Pleasant Street, 603/224-4041

Connecticut 06103, One Financial Plaza, 203/244-3600 Vermont 05602, 87 State Street, P.O. Box 605, 802/229-0538 Rhode Island 02903, 40 Fountain Street, 401/528-4586

Eastern (Region 2)

New York 10007, 26 Federal Plaza, Room 3100, 212/264-4355 New York 12210, 99 Washington Avenue, 518/472-6300

New York 14901, 180 State Street, Room 412, 607/734-4686 Puerto Rico 00919, Chardon and Bolivia Streets, 809/753-4572 New York 11746, 425 Broad Hollow Road, 516/752-1626

New Jersey 07102, 970 Broad Street, Room 1635, 201/645-2434

New Jersey 08104, 1800 East Davis Street, 609/757-5183

New York 14014, 100 State Street, 716/263-6700

New York 13260, 100 South Clinton Street, Room 1071, 315/423-5383

New York 14202, 111 West Huron Street, 716/846-4301

Virgin Islands 00801, Federal Office Building, Veterans' Drive, 809/774-8530

Mid-Atlantic (Region 3)

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Towson, Maryland 21204, 8600 La Salle Road, 301/962-4392

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Alabama 35205, 908 South 20th Street, 213/688-2956

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North Carolina 27834, 215 South Evans Street, 919/752-3798 South Carolina 29201, 1801 Assembly Street, 803/765-5376 Florida 33134, 2222 Ponce de Leon Boulevard, 305/350-5521 Mississippi 39201, 100 West Capitol Street, 601/969-4371

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Kentucky 40202, 600 Federal Place, Room 188, 502/582-5971

Tennessee 37219, 404 James Robertson Parkway, Suite 1012, 615/251-5881

Tennessee 37902, 502 South Gay Street, Room 307, 615/637-9300

Tennessee 38103, 167 North Main Street, 901/521-3588

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Ohio 43215, 85 Marconi Boulevard, 614/469-6860 Ohio 45202, 550 Main Street, Room 5028, 513/684-2814

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Michigan 48226, 477 Michigan Avenue, 313/266-6000 Michigan 49885, 540 West Kave Avenue, 906/225-1108 Indiana 46204, 575 North Pennsylvania Street, 317/269-7272 Wisconsin, 53703, 122 West Washington Avenue, 608/264-5261 Wisconsin 53202, 517 East Wisconsin Avenue, 414/291-3941 Wisconsin 54701, 500 South Barstow Street, Room B9AA, 715/834-9012 Minnesota 55402, 12 South Sixth Street, 612/725-2362

## Southwest (Region 6)

Texas 75242, 1100 Commerce Street, 214/767-0605 New Mexico 87110, 5000 Marble Avenue, NE., 505/766-3430 Texas 77002, 1 Allen Center, 500 Dallas Street, 713/226-4341 Arkansas 72201, 611 Gaines Street, 507/378-5871 Texas 79401, 1205 Texas Avenue, 806/762-7466 Texas 79902, 4100 Rio Bravo, Suite 300, 915/543-7586

Harlington, Texas 78550, 222 East Van Buren, 512/423-4534
Texas 78408, 3105 Leopard Street, 512/888-3331
Texas 75670, 100 South Washington Street, Room G12, 214/935-5257
Louisiana 70113, 1001 Howard Avenue, 504/589-6685
Louisiana 71101, 500 Fannin Street, 318/226-5196
Oklahoma 73102, 200 N.W. 5th Street, 405/231-4301
Texas 78206, 727 East Durango, Room A-513, 512/229-6250

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# Rocky Mountain (Region 8)

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#### Western (Region 9)

California 94105, 211 Main Street, 415/556-7487
California 93712, 1229 N Street, 209/487-5189
California 95825, 2800 Cottage Way, 916/484-4726
Hawaii 96850, 300 Ala Moana, 808/546-8950
Guam 96910, Pacific Daily News Building, 671/477-8420
California 90071, 350 South Figueroa Street, 213/688-2956
Nevada 89101, 301 East Stewart, 702/385-6611
Nevada 89505, 50 South Virginia Street, 702/784-5268
Arizona 85012, 3030 North Central Avenue, 602/261-3611
California 92188, 880 Front Street, 714/293-5440

#### Northwest (Region 10)

Washington 98174, 915 Second Avenue, 206/442-5534 Alaska 99501, 1016 West Sixth Avenue, Suite 200, 907/271-4022 Alaska 99701, 101 12th Avenue, 907/452-1951 Idaho 83701, 1005 Main Street, 208/334-1096 Oregon 97204, 1220 South West Third Avenue, 503/221-2682 Washington 99120, Courthouse Bldg., Room 651, 509/456-5310

# **Summary Checklist**

A checklist summarizing the leading ideas and recommendations detailed in this publication is provided below. This list can be used by business organizations in assessing their current activities and determining which additional activities might be worth trying.

| Booklet Item   | We're<br>Already<br>Doing It | A Good<br>Idea | Not<br>Applicable |
|--|------------------------------|----------------|-------------------|
| SERVICES AND ACTIVITIES  |                              |                |                   |
| Publications (frequently offered)  Membership directory                          |                              |                |                   |
| Newsletter or magazine<br>Legislative, technical or                              |                              |                |                   |
| professional journal<br>Legislative/technical<br>bulletins                       |                              |                |                   |
| Handbooks and manuals<br>Digests of laws   |                              |                |                   |
| Directory of buyers and suppliers  |                              |                |                   |
| Publications (Innovative)  Advice on cash management                             |                              |                |                   |
| Alternative product lines  |                              |                |                   |
| tunities Tips on the law Legislative tracking charts                             |                              |                |                   |
| Technology updatesOther  |                              |                |                   |
|  |                              |                |                   |
| Conventions/Conferences/Seminars Seminars with universities                      |                              | ·              |                   |
| Advanced management courses  Future-oriented briefings  Minicomputer orientation |                              |                |                   |
| Traveling seminars Other   |                              |                |                   |
|  |                              |                |                   |
| Consulting and research services Staff consultants                               |                              |                |                   |
| Consultant hotlinesShared-cost legal counsel                                     |                              |                |                   |
| Group insuranceBank loan negotiationsBusiness libraries                          |                              |                |                   |
| Referral to free servicesOther   |                              |                |                   |
| <u> </u>   |                              |                |                   |

| Booklet Item                               | We're<br>Already<br>Doing It | A Good<br>Idea | Not<br>Applicable |
|--|------------------------------|----------------|-------------------|
| GOVERNMENT RELATIONS                       |                              |                | ·                 |
| Grants, contracts, loans                   |                              |                |                   |
| Government contracting fairs               |                              |                |                   |
| promoting and equitable share of contracts |                              |                |                   |
| Enrolling members in SBA PASS bank         |                              |                |                   |
| Enrolling members on bidder mail-          |                              |                | ·                 |
| ing lists                                  |                              |                |                   |
| Other                                      |                              |                |                   |
|  |                              |                | ·                 |
| Monitoring and advocacy                    |                              |                |                   |
| Congressional testimony                    |                              |                |                   |
| Legislative search                         |                              |                |                   |
| Government publications                    |                              |                |                   |
| ther                                       |                              |                |                   |
|  |                              |                |                   |
|  |                              |                |                   |
| Regulation                                 | ,                            |                |                   |
| Proposing self-regulation                  |                              |                |                   |
| Reducing costs of compliance               |                              |                |                   |
| OSHA compliance committees                 |                              |                |                   |
| Other                                      |                              |                |                   |
| COALITIONS AND CAMPAIGNS                   |                              |                |                   |
| Single-goal coalitions                     |                              |                |                   |
| Inter-industry coalitions                  |                              |                |                   |
| Regional coalitions                        |                              |                |                   |
| Annual small business campaigns            |                              |                |                   |
| Other                                      |                              |                |                   |
|  |                              | ·              |                   |
| OUTREACH TO THE PUBLIC                     |                              |                |                   |
| Free goods and services                    |                              |                |                   |
| Scholarship contests                       |                              | · ·            |                   |
| Small business week                        |                              |                |                   |
| Other                                      |                              |                |                   |
|  |                              |                |                   |
|  |                              |                |                   |
|  |                              |                |                   |
| ADVOCACY COUNCILS                          |                              |                |                   |
|  |                              |                |                   |
|  |                              |                | <u> </u>          |

# Office of Advocacy

The Chief Counsel for Advocacy was established under Public Law 94-305 to serve as a voice for small business within the federal government. Advocacy's mission is to study the role of small business in the American economy, to analyze the needs of small business in maintaining and increasing its competitive strength, and to work for policies and programs that will create a healthier environment for small business.

#### 1. Ombudsman Services

Practical assistance for small business concerns, particularly those regarding Federal regulation and paperwork.

# 2. Interagency Policy Affairs

Represents small businesses' viewpoints directly to other Federal agencies which are proposing or implementing regulations.

Monitors Federal agencies' actions and works to amend their policies when those policies have an adverse effect on small businesses.

#### 3. Economic Research

Compiles data on the performance of small firms and manages studies on the impact of the economic environment on the small business sector. Establishes and maintains a small business data base to reinforce those analytical capabilities by providing a comprehensive description of the population of small businesses in the U.S.

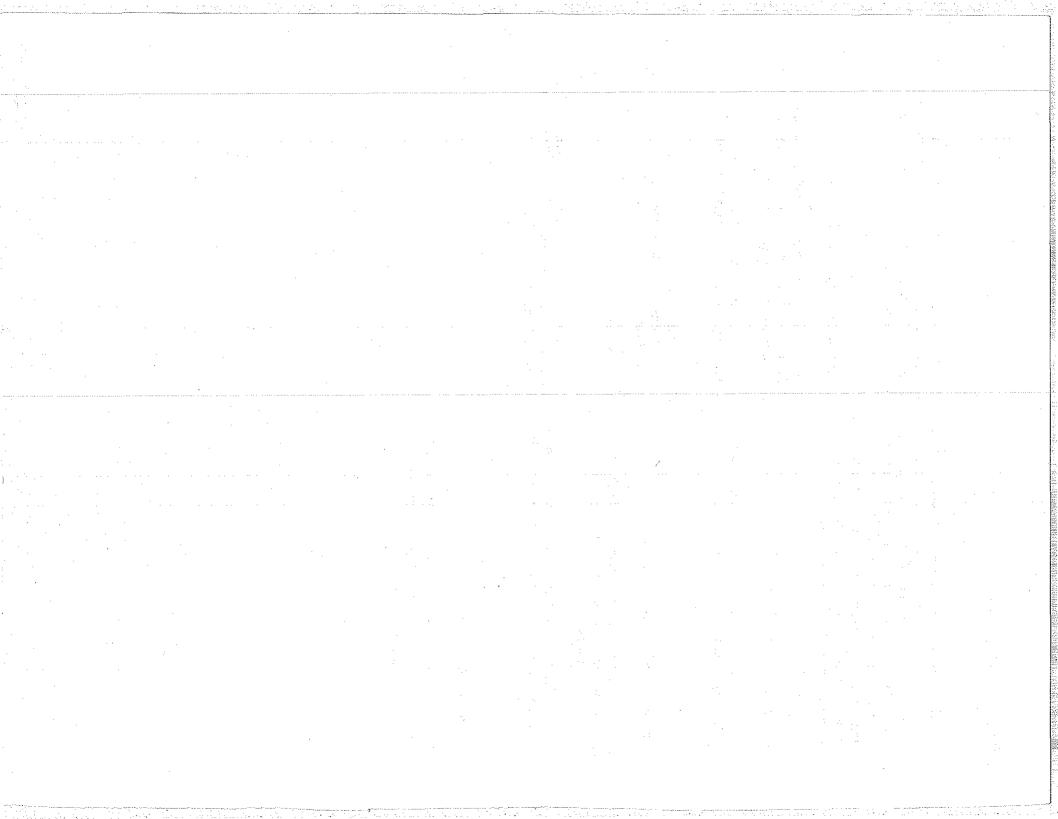
# 4. Information/Organizations

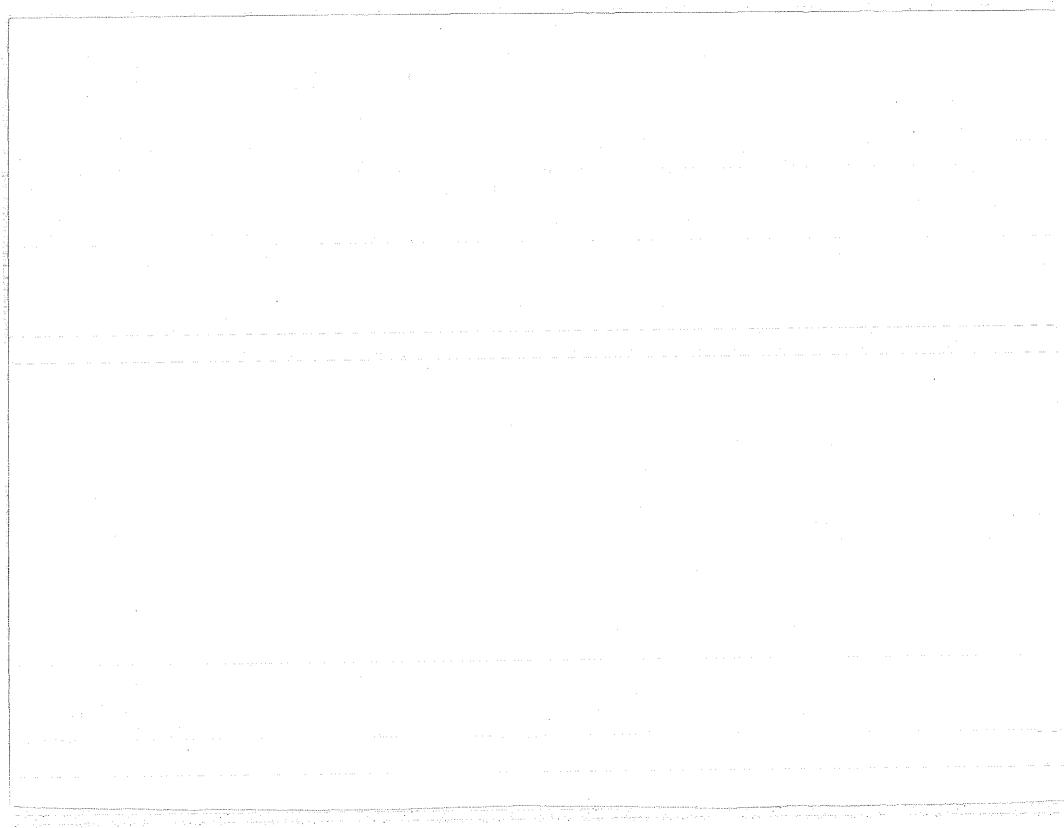
Functions as a central source of information on the Federal government for small businesses, small business organizations and trade associations.

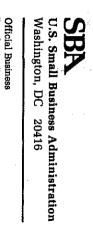
Additional information about the Office of Advocacy and its programs may be obtained by writing:

Office of Advocacy U.S. Small Business Administration 1441 L Street, N.W. Washington, D.C. 20416 (202) 653-6533

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# Small Business Development Centers

# and Consortium Members

| Region | University and Address  |                                       | <u>Contact</u>  | Telephone                   |
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| i.     | UNIVERSITY OF SOUTHERN MAINE* Small Business Development Center   |                                       | Mr. Frederick H. Greene, Director                                     | (207) 780-4423              |
|        | 246 Deering Avenue<br>Portland, Maine 04102   |                                       | Mr. Stuart Pennels, Associate<br>Director of New Enterprise Institute |                             |
|        | University of Maine - Machias<br>Small Business Development Center  |                                       | Dr. William Little, Director  | (207) 255-3313              |
|        | Math and Science Building Nachias, Maine 04654  |                                       |   |                             |
|        | University of Maine - Orono<br>Small Business Development Center  |                                       | Mr. Howard Foley, Acting Director                                     | (207) 581-7620              |
|        | Winslow Hall<br>Orono, Maine 04469  |                                       |   |                             |
|        | UNIVERSITY OF MASSACHUSETTS* Small Business Development Center School of Business Administration Amherst, Massachusetts 01003 |                                       | Mr. Gerald W. Hayes, Acting Director                                  | (413) 549-4930<br>Ext. 304  |
|        | Boston College<br>Metropolitan Regional Small Business  |                                       | Dr. Jack McKiernan, Director  | (617) 969-0100<br>Ext. 4093 |
|        | Development Center<br>96 College Road   |                                       |   | LAU. 4033                   |
|        | Chestnut Hill, Massachusetts 02167  | · · · · · · · · · · · · · · · · · · · |   |                             |
|        | University of Massachusetts<br>Western Regional Small Business<br>Development Center  |                                       | Mr. Merwin Tober, Director  | (413) 737-6712<br>Ext. 2270 |
|        | 101 State Street, Rm. 216<br>Springfield, Massachusetts 01103   |                                       |   |                             |

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| Region | University and Address   | Contact  | Telephone                              |
|--------|--|--|--|
|        | University of Lowell Northeast Regional Small Business Development Center Research Foundation 450 Aiken Street Lowell, Massachusetts 01854 | Mr. Daniel E. Diamond, Director                        | (617) 452-5000<br>Ext. 2270            |
|        | UNIVERSITY OF CONNECTICUT* Small Business Development Center School of Business Administration Box U-41D Storrs, Connecticut 06268         | Mr. Jacob M. Duker, Director                           | (203) 486-4135                         |
|        | University of Connecticut - Hartford<br>Small Business Development Center<br>39 Woodland Street<br>Hartford, Connecticut 06105             | Mr. Hugh O'Neill, Director                             | (203) 241-4982<br>241-4983<br>241-4984 |
|        | University of New Haven<br>Small Business Development Center<br>300 Orange Avenue<br>West Haven, Connecticut 06510                         | Mr. Warren Smith, Director                             | (203) 934-6321                         |
| II     | RUTGERS UNIVERSITY* Small Business Development Center 3rd Floor - Ackerson Hall 180 University Street Newark, New Jersey 07102             | Mr. Roland Crump, Director<br>Mr. Russell Mass, Deputy | (201) 648-5621                         |
|        | Cumberland County College<br>Small Business Development Center<br>P. O. Box 517<br>Vineland, New Jersey 08360                              | Professor John deYoung, Director                       | (609) 691-8600                         |

| Region | University and Address   | Contact                               | <u>Telephone</u>           |
|--------|--|---------------------------------------|----------------------------|
|        | Brookdale Community College<br>Business/Management Team<br>Small Business Development Center<br>Newman Springs Road<br>Lincroft, New Jersey 07738            | Professor Larry Novick, Director      | (201) 842-1900<br>Ext. 229 |
|        | Ramapo College<br>Small Business Development Center<br>Ramapo Valley Road<br>P.O. Box 542<br>Mahwah, New Jersey 07430  | Dr. Kevin J. McDermott, Director      | (201) 825-2800             |
|        | Mercer County Community College<br>Small Business Development Center<br>and Management Training Center<br>1200 Old Trenton Road<br>Trenton, New Jersey 08690 | Professor Nunzio E. Cernero, Director | (609) 586-4800             |
|        | Glassboro State College<br>Management Institute<br>Small Business Development Center<br>Glassboro, New Jersey 08205  | Dr. Robert Lynch, Director            | (609) 445-5000             |
|        | Raritan Valley Chamber of Commerce<br>Small Business Development Center<br>303 George Street - Suite 405<br>New Brunswick, New Jersey 08901                  | Mr. Michael Simonetti, Director       | (201) 545-3300             |
|        | Elizabeth Economic Development<br>Corporation<br>Small Business Development Center<br>1209 East Grand Street<br>Elizabeth, New Jersey 07201                  | Mr. Michael G. Cohan, Director        | (201) 289-0262             |
| III    | HOWARD UNIVERSITY* Small Dusiness Development Center 2361 Sherman Avenue, N.W. Washington, D.C. 20059  | Mr. Warren Van Hook, Director         | (202) 636-7187             |

| Region | University and Address  |   | Contact                           | <u>Telephone</u>           |
|--------|---|---|-----------------------------------|----------------------------|
|        | University of the District of Columbia<br>Small Business Development Center<br>School of Business and Public Manageme<br>927 Ninth Street, N.W.<br>Washington, D.C. 20001                           | 6 | Dr. Patrick Hughes, Director      | (202) 727-2227             |
|        | Small Business Development Center<br>of Pennsylvania<br>Office of the State Director<br>University of Pennsylvania<br>The Wharton School<br>413 Centenary Drive<br>Philadelphia, Pennsylvania 19104 |   | Ms. Susan Garber, State Director  | (215) 243-4861             |
| III    | UNIVERSITY OF PENNSYLVANIA*  Small Business Development Center The Wharton School 413 Centenary Drive Philadelphia, Pennsylvania 19104  |   | Mr. Bernard Tenenbaum, Director   | (215) 243-4861<br>Ext. 228 |
|        | Bucknell University<br>Small Business Development Center<br>Lewisburg, Pennsylvania 17837   |   | Professor Charles Coder, Director | (717) 524-1249             |
|        | Clarion State College<br>Small Business Development Center<br>School of Business Administration<br>Clarion, Pennsylvania 16214  |   | Mr. Woodrow Yeaney, Director      | (814) 226-2600             |
|        | Duquesne University<br>Small Business Development Center<br>School of Business and Management<br>Pittsburgh, Pennsylvania 15219   |   | Mr. Peter Federici, Director      | (412) 434-6231             |
|        | Gannon University Small Business Development Center Zurn Hall Erie, Pennsylvania 16541  |   | Mr. Jerome R. Kenwood, Director   | (814) 871-7000             |

| Region | University and Address   | Contact                           | Telephone                  |
|--------|--|-----------------------------------|----------------------------|
|        | Lehigh University<br>Small Business Development Center<br>412 South New Street<br>Bethlehem, Pennsylvania 18015  | Ms. Edith Ritter, Director        | (215) 861-3980             |
|        | Pennsylvania State University<br>Small Business Development Center<br>Capitol Campus<br>Craigs Building, Route 230<br>Middletown, Pennsylvania 17057                       | Mr. Harold Hoy, Director          | (717) 948-6031             |
|        | University of Pittsburgh<br>Small Business Development Center<br>Graduate School of Business<br>Pittsburgh, Pennsylvania 15260   | Mr. Clarence K. Curry, Director   | (412) 624-6435             |
|        | University of Scranton Small Business Development Center O'Hara Hall Scranton, Pennsylvania 18510  | Mr. Jerome F. McCormack, Director | (717) 961-7588             |
|        | Wilkes College<br>Small Business Development Center<br>Institute of Regional Affairs<br>165 South Franklin Street<br>Wilkes Barre, Pennsylvania 18703                      | Ms. Sandra Beynon, Director       | (717) 824-4651<br>Ext. 228 |
| IV     | Small Business Development Center of Alabama Office of the State Director University of Alabama - Birmingham 1000 South Twelfth Street - Suite F Birmingham, Alabama 35294 | Dr. Fred Myrick, State Director . | (205) 934-7260             |

| Region | University and Address  | Contact                        | <u>Telephone</u>           |
|--------|---|--------------------------------|----------------------------|
|        | UNIVERSITY OF ALABAMA* in Birmingham Small Business Development Center 1000 South Twelfth Street, Suite F Birmingham, Alabama 35294             | Ms. Sherry Dilbeck, Director   | (205) 934-6760             |
|        | Alabama A&M University<br>Small Business Development Center<br>School of Business<br>Normal, Alabama 35762                                      | Dr. Edwin D. Marsh, Director   | (205) 859-7481             |
|        | Alabama State University<br>Small Business Development Center<br>College of Business Administration<br>Montgomery, Alabama 36101                | Dr. Thomas Knight, Director    | (205) 832-6072             |
| IV     | Auburn University<br>Small Business Development Center<br>School of Business<br>Auburn, Alabama 36830   | Dr. Ed Kern, Director          | (205) 826 4030             |
|        | <br>Jacksonville State University Small Business Development Center College of Commerce and Business Administration Jacksonville, Alabama 30265 | Dr. Parker Granger, Director   | (205) 435-9820<br>Ext. 501 |
|        | Troy State University<br>Small Business Development Center<br>School of Business<br>Troy, Alabama 36081   | Dr. Felix Livingston, Director | (205) 566-3000<br>Ext. 144 |
|        | Tuskegee Institute<br>Small Business Development Center<br>Department of Business<br>Tuskegee, Alabama 36088                                    | Ms. Patricia McGowan, Director | (205) 727-8116             |

| Region      | University and Address  | Contact   | <u>Tel epho</u>      | ne      |
|-------------|---|---|----------------------|---------|
|             | University of Alabama Small Business Development Center College of Commerce and Business Administration University, Alabama 35486                       | Dr. William R. Bennett, Director  | (205) 34             | 48-7621 |
|             | University of Alabama - Huntsville<br>Small Business Development Center<br>Department of Business Administration<br>Huntsville, Alabama 35807           | Dr. Marsha D. Griffin, Director   | (205) 89             | 95-6682 |
|             | University of North Alabama<br>Small Business Development Center<br>School of Business<br>Florence, Alabama 35630                                       | Dr. William S. Stewart, Director  | (205) 76<br>Ext. 4   |         |
|             | University of South Alabama<br>Small Business Development Center<br>Business and Management Studies<br>Mobile, Alabama 36688                            | <br>Mrs. Elizabeth LaFleur, Director  | (205) 40             | 60-6130 |
|             | Small Business Development Center of Florida University of West Florida 137 Hospital Drive - Suite H Fort Walton Beach, Florida 32548                   | Professor Allan B. Cowart,<br>State Coordinator<br>Mr. Jerry Widman, Deputy | (904) 24<br>(904) 24 |         |
| . <b>IV</b> | UNIVERSITY OF WEST FLORIDA* Small Business Development Center School of Business Administration Pensacola, Florida 32504                                | Mr. Donald M. Clause, Director  | (904) 4<br>Ext. 2    |         |
|             | Florida Agricultural and Mechanical<br>University<br>Small Business Development Center<br>School of Business and Industry<br>Tallahassee, Florida 32307 | Mr. Herb Taylor, Director   | (904) 59             | 99-3170 |

| Region       | University and Address   | <br>Contact                  | <u>Telephone</u>            |
|--------------|--|------------------------------|-----------------------------|
|              | Florida State University<br>Small Business Development Center<br>Business Building, Room 129<br>Tallahassee, Florida 32306   | Dr. John Kerr, Director      | (904) 644-2053              |
|              | University of North Florida<br>Small Business Development Center<br>College of Business<br>Building 11, Room 2197<br>P.O. Box 17074<br>Jacksonville, Florida 32216 | Dr. Lowell Salter, Director  | (904) 646-2476              |
|              | University of Central Florida<br>Small Business Development Center<br>College of Business<br>Orlando, Florida 32816  | Dr. Ronald Rubin, Director   | (305) 275-2796<br>275-2797  |
| IV           | University of South Florida<br>Small Business Development Center<br>College of Business, Room 3331<br>Tampa, Florida 33620   | Mr. William Manck, Director  | (813) 974-4274<br>974-4264  |
|              | Florida Atlantic University<br>Small Business Development Center<br>College of Business<br>Fleming Hall Building, Room 400-A<br>Boca Raton, Florida 33431          | Dr. Larry Klatt, Director    | (305) 395-5100<br>Ext. 3960 |
| Trailor MO-1 | Florida International University Small Business Development Center College of Business, Tamiami Campus Deuxieme Maison Building, Room 305-B Miami, Florida 33199   | Mr. Marvin Nesbitt, Director | (305) 552-2272              |
|              | University of Miami<br>Small Business Development Center<br>College of Business<br>P.O. Box 249145<br>Coral Gables, Florida 33124                                  | Dr. Dan Steinhoff, Director  | (305) 284-4618              |

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| Region                                | University and Address   | Contact  | <u>Telephone</u>           |
|                                       | Stetson University Small Business Development Center P.O. Box 1398 Delande, Florida 32720  | Mr. David Nylen, Director  | (904) 734-4121<br>Ext. 310 |
|                                       | Florida Keys Community College<br>Small Business Development Center<br>Key West, Florida 33040   | Dr. Bill Smith, Director   | (305) 296-9081             |
| IV                                    | UNIVERSITY OF GEORGIA* Small Business Development Center Brooks Hall, Room 348   | Mr. Larry Bramblett, Director<br>Mr. Red Sanders, Associate Director | (404) 542-5760             |
|                                       | Athens, Georgia 30602  Clayton Junior College Small Business Development Center P.O. Box 285  Morrow, Georgia 30260                          | Mr. George L. St.Germain, Director                                   | (404) 961-3414             |
|                                       | Georgia Southern College<br>Southeast Georgia Small Business<br>Development Center<br>Landrum Center<br>LB 8156<br>Statesboro, Georgia 30460 | Mr. Lewis Stewart, Director  | (912) 681-5194             |
|                                       | Albany Junior College<br>Small Business Development Center<br>P.O. Box 308<br>Albany, Georgia 31702  | Ms. Sabrina Smith, Director  | (912) 439-7232             |
|                                       | Central Georgia<br>Small Business Development Center<br>P.O. Box 169<br>Macon, Georgia 31061   | Mr. Jeff Gibbs, Director   | (912) 746-7601             |
|                                       | Augusta College<br>Small Business Development Center<br>School of Business<br>2500 Walton Way<br>Augusta, Georgia 30910                      | Dr. Bill Monge, Director   | (404) 828-3566<br>2/82     |
|                                       |  |  | •                          |

| Region | University and Address  |   | Contact                            | <u>Telephone</u> |
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|        | Columbus College<br>Small Business Development Center<br>School of Business<br>Columbus, Georgia 31902  |   | Mr. Benno Rothschild, Director     | (404) 568-2044   |
|        | Georgia State University Small Dusiness Development Center Business Information Center Georgia State Urban Life Building Atlanta, Georgia 30303 |   | Mr. Lee Quaterman, Director        | (404) 658-3550   |
|        | Floyd Junior College<br>Northwest Georgia Small Business<br>Development Center<br>P.O. Box 1864<br>Rome, Georgia 30163                          |   | Dr. James W. Boswell, Director     | (404) 295-6324   |
| IV     | Valdosta State College<br>Small Business Development Center<br>Valdosta, Georgia 31690  |   | Mr. William Fredenberger, Director | (912) 247-3262   |
|        | Savannah State College<br>Small Business Development Center<br>Savannah, Georgia 31405<br>(For Mailing Purposes Only)                           |   | Dr. Lee Parrish, Director          | (912) 356-2261   |
|        | UNIVERSITY OF KENTUCKY* Small Business Development Center Commerce Building, Room 415 Lexington, Kentucky 40506                                 | * | Mr. James Kurz, Director           | (606) 257-1751   |
|        | University of Louisville<br>Small Business Development Center<br>School of Business<br>Louisville, Kentucky 40208                               |   | Mr. John Martin Brown, Director    | (502) 588-6456   |
|        | Murray State University Small Business Development Center College of Business and Public Affairs Murray, Kentucky 42071                         |   | Mr. Otis H. Erwin, Director        | (502) 753-4134   |

| Region | <br>University and Address  | Contact                        | Telephone                   |
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|        | UNIVERSITY OF MISSISSIPPI* Small Business Development Center 1855 Eastover Drive Jackson, Mississippi 39211                                   | Mr. James A. Fleming, Director | (601) 982-6684              |
|        | Alcorn State University<br>Small Business Development Center<br>Academic Affairs Division<br>Lorman, Mississippi 39096                        | Dr. Malvin Williams, Director  | (601) 877-3711<br>Ext. 180  |
|        | Delta State University<br>Small Business Development Center<br>School of Business<br>Cleveland, Mississippi 38733                             | Mr. Gary Young, Director       | (601) 843-8512              |
| IV     | Jackson State University<br>Small Business Development Center<br>School of Business and Economics<br>Jackson, Mississippi 39217               | Dr. Forest Thompson, Director  | (601) 968-2411              |
|        | Millsaps College<br>Small Business Development Center<br>School of Management<br>Jackson, Mississippi 39210                                   | Dr. Jerry Witt, Director       | (601) 354-5201              |
|        | Mississippi State University<br>Small Business Development Center<br>College of Business and Industry<br>Mississippi State, Mississippi 39762 | Dr. Bill Koby, Director        | (601) 325-2580              |
|        | Mississippi University for Women<br>Small Business Development Center<br>School of Business - Parkinson Hall<br>Columbus, Mississippi 39701   | Dr. Martin Gonzales, Director  | (601) 328-0345              |
|        | Mississippi Valley State University<br>Small Business Development Center<br>P.O. Box 992<br>Itta Bena, Mississippi 38941                      | Dr. Cliff Williams, Director   | (601) 254-9041<br>Ext. 6562 |

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| gion | University and Address   | Contact                              | Telephone                  |
|------|--|--------------------------------------|----------------------------|
|      | Research and Development Center Small Business Development Center Business and Industry Development Division Ridgewood Road Jackson, Mississippi 39211                       | Mrs. Alice Lusk, Acting Director     | (601) 982-6518             |
|      | University of Mississippi<br>Small Business Development Center<br>School of Business Administration<br>Room 218 - Connor Hall<br>University, Mississippi 38677               | Dr. Lynn Spruill, Director           | (601) 322~5820             |
|      | University of Mississippi - Oxford<br>Small Dusiness Development Center<br>University, Mississippi 38677   | Mr. Raleigh Byars, Director          | (601) 232-5001             |
|      | University of Southern Mississippi<br>Small Business Development Center<br>College of Business Administration<br>Southern Station Box 5021<br>Hattiesburg, Mississippi 39401 | Dr. Joseph A. Greene, Director       | (601) 266-7251             |
| IV   | Small Business Development Center<br>of South Carolina<br>Office of the State Director   | Mr. W. F. Littlejohn, State Director | (803) 777-5118<br>777-7877 |
|      | University of South Carolina<br>College of Business Administration<br>Columbia, South Carolina 29208   |                                      |                            |
|      | UNIVERSITY OF SOUTH CAROLINA* Small Business Development Center Basic Service Center   | Mr. Casey Blonaisz, Director         | (803) 777-5118             |
|      | College of Business Administration<br>Columbia, South Carolina 29208   |                                      |                            |

| Region    | University and Address   | Contact                          | Telephone  |
|-----------|--|----------------------------------|--|
|           | College of Charleston Small Business Development Center Regional Associate of University of South Carolina Basic Service Center College of Business Administration 72 George Street Charleston, South Carolina 29401 | Mr. Brian Borry, Director        | (803) 792-4065   |
|           | Clemson University Small Business Development Center Basic Service Center College of Industrial Management and Textile Science Sirrine Hall Clemson, South Carolina 29632  | Mr. Charles F. Paterno, Director | (803) 565-3228   |
| <b>IV</b> | South Carolina State College<br>Minority Business Development Center<br>Department of Business Administration<br>Moss Hall<br>Orangeburg, South Carolina 29117   | Mr. Bill Heggins, Director       | (803) 534- 6894  |
|           | Winthrop College<br>Small Business Development Center<br>Basic Service Center<br>School of Business Administration<br>Kinard Hall<br>Rock Hill, South Carolina 29733   | Mr. Russell Watson, Director     | (803) 323-2208   |
|           | Coastal Carolina College<br>Small Business Development Center<br>Regional Associate<br>School of Business Administration<br>Conway, South Carolina 29526   | Mr. Howard Godwin, Director      | (803) 448-8419<br>Ext. 257<br>(803) 347-3161<br>Ext. 257 |

| Region | University and Address   | Contact   | Telephone                              |
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|        | Small Business Development Center<br>of Wisconsin<br>Office of the State Director<br>University of Wisconsin<br>One South Park Street<br>Madison, Wisconsin 53706  | Dr. Robert Pricer, State Director<br>Mr. Bob Bachman, Associate Director<br>Dr. Wesley Mott, Information Specialist | (608) 263-7794<br>263-2218<br>263-7830 |
|        | UNIVERSITY OF WISCONSIN* Small Business Development Center One South Park Street Madison, Wisconsin 53706  | Mr. Bill Pinkovitz, Director  | (608) 263-2221                         |
|        | University of Wisconsin - Eau Claire<br>Small Business Development Center<br>Schneider Hall, #113<br>Eau Claire, Wisconsin 54701                                   | Dr. Ronald Decker, Director   | (715) 836-5636                         |
|        | University of Wisconsin - Green Bay<br>Small Business Development Center<br>Library Learning Center - Room 710<br>Green Bay, Wisconsin 54302                       | Dr. Jack Powers, Director   | (414) 465-2407                         |
|        | University of Wisconsin - La Crosse<br>Small Business Development Center<br>School of Business Administration<br>La Crosse, Wisconsin 54601                        | Dr. A. William Pollman, Director  | (608) 785-8648                         |
|        | University of Wisconsin - Milwaukee<br>Small Eusiness Development Center<br>929 North Sixth Street<br>Milwaukee, Wisconsin 53226                                   | Mr. Jerry White, Director   | (414) 257-5576                         |
|        | University of Wisconsin - Oshkosh<br>Small Business Development Center<br>Business Outreach Office<br>Clow Faculty Building - Room 107<br>Oshkosh, Wisconsin 54901 | Dr. Pete Ward, Director   | (414) 424-1453                         |

| Region | University and Address   | Contact                         | Telephone      |
|--------|--|---------------------------------|----------------|
|        | University of Wisconsin - Parkside<br>Small Business Development Center<br>Molinaro Building - Room 344<br>Kenosha, Wisconsin 53141                        | Mr. Alan Bozon, Director        | (414) 553-2047 |
|        | University of Wisconsin - Platteville<br>Small Business Development Center<br>510 Pioneer Tower<br>Platteville, Wisconsin 53818                            | Dr. Charles Schilling, Director | (608) 342-1467 |
|        | University of Wisconsin - Stevens Point<br>Small Business Development Center<br>Room 452<br>Stevens Point, Wisconsin 54481                                 | Mr. John Mozingo, Director      | (715) 346-3391 |
|        | University of Wisconsin - Superior<br>Small Business Development Center<br>1800 Grand Avenue<br>Superior, Wisconsin 54880                                  | Dr. Richard Shreve, Director    | (715) 392-8101 |
|        | University of Wisconsin - Whitewater<br>Small Business Development Center<br>4133 Carlson<br>Whitewater, Wisconsin 53190                                   | Mr. Bob Smith, Director         | (414) 472-3217 |
| V      | Small Business Development Center<br>of Minnesota<br>Office of the State Director<br>St. Thomas College<br>2115 Summit Avenue<br>St. Paul, Minnesota 55105 | Mr. Tim Donahue, State Director | (612) 647-5840 |
|        | ST. THOMAS COLLEGE*  Small Dusiness Development Center 2115 Summit Avenue St. Paul, Minnesota 55105  | Mr. Tim Donahue, Director       | (612) 647-5840 |

| Region | <u>U</u> | Iniversity and Address   | Contact                        | Telephone      |
|--------|----------|--|--------------------------------|----------------|
|        |          | Bemidji State University<br>Small Business Development Center<br>Demidji, Minnesota 56601  | Dr. Milton Will, Director      | (218) 755-2754 |
|        |          | Department of Economic Development<br>Small Business Development Center<br>480 Cedar Street<br>St. Paul, Minnesota 55101   | Ms. Delores Kauth, Director    | (612) 296-2755 |
|        |          | Mankato State University<br>Small Business Development Center<br>Mankato, Minnesota 56001  | Dr. Chloe Elmgren, Director    | (507) 389-2963 |
|        |          | Minnesota Agricultural Extension<br>Service (MAES)<br>Small Business Development Center<br>University of Minnesota<br>218-J Classroom Office Building<br>St. Paul, Minnesota 55108 | Mr. Tom Milton, Field Director | (218) 631-2006 |
| v      |          | Moorhead State University<br>Small Business Development Center<br>Moorhead, Minnesota 56560  | Mr. Eddy Birrer, Director      | (218) 236-2486 |
|        |          | Southwest State University<br>Small Business Development Center<br>Room AS 214<br>Marshall, Minnesota 56258  | Mr. Dick O'Connell, Director   | (507) 537-7386 |
|        |          | St. Cloud State University<br>Small Business Development Center<br>College of Business<br>St. Cloud, Minnesota 56301   | Dr. Dwaine Tallent, Director   | (612) 255-3215 |
|        |          | University of Minnesota - Duluth<br>Small Dusiness Development Center<br>Business Administration Department<br>Duluth, Minnesota 55812   | Dr. Don Ireland, Director      | (218) 726-7150 |

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| Region                                  | University and Address  | <u>Contact</u>               | Telephone                  |
|   | Winona State University<br>Small Business Development Center<br>Eighth and Johnson<br>Winona, Minnesota 55987   | Mr. Giles Schmidt, Director  | (507) 457-2184             |
| γı                                      | UNIVERSITY OF ARKANSAS* Small Dusiness Development Center P.O. Box 3017 Little Rock, Arkansas 72203   | Ms. Joanne Jones, Director   | (501) 371-5381             |
|   | Arkansas State University Small Business Development Center Drawer 2650 - State University Jonesboro, Arkansas 72467  | Dr. Bill Williams, Director  | (501) 972-3517             |
| \$.<br>3<br>30<br>30<br>20<br>20        | Harding University Small Business Development Center Department of Business and Economics Searcy, Arkansas 72143  | Dr. Bob Reely, Director      | (501) 268-6161<br>Ext. 497 |
|   | Henderson State University Small Business Development Center Box 2231 Arkadelphia, Arkansas 71923   | Dr. James A. Tatum, Director | (501) 246-5511<br>Ext. 327 |
|   | Phillips County Community College<br>Small Business Development Center<br>Room A-210<br>Helena, Arkansas 72342  | Dr. G. E. Triplett, Director | (501) 338-6474             |
|   | University of Arkansas - Fayetteville<br>Small Business Development Center<br>Business Administration Bldg Room 117<br>Fayetteville, Arkansas 72701                           | Dr. Don Cook, Director       | (501) 575-5148             |
|   | University of Arkansas - Little Rock<br>Small Business Development Center<br>Business Administration Bldg Room 105<br>33rd & University Avenue<br>Little Rock, Arkansas 72204 | Dr. Ray Robbins, Director    | (501) 569-3340             |
|   |   |                              | 2/82                       |

| Region | University and Address  | Contact                               | Telephone      |
|--------|---|---------------------------------------|----------------|
|        | University of Arkansas - Monticello<br>Small Business Development Center<br>UAM Station 3496<br>Monticello, Arkansas 71655  | Dr. Joe Moore, Director               | (501) 367-6811 |
|        | University of Central Arkansas<br>Small Business Development Center<br>College of Business Administration<br>Conway, Arkansas 72032   | Dr. Homer Saunders, Director          | (501) 450-3190 |
| VII    | Small Business Development Center of Iowa Office of the State Director Iowa State University Center for Industrial Research and Service (CIRAS) Room 205 - Engineering Annex Ames, Iowa 50011 | Mr. Lloyd E. Anderson, State Director | (515) 294-3420 |
|        | IOWA STATE UNIVERSITY* Small Business Development Center Center for Industrial Research and and Service (CIRAS) Room 205 - Engineering Annex Ames, Iowa 50011                                 | Mr. David H. Swanson, Director        | (515) 294-3420 |
|        | Drake University Small Eusiness Development Center College of Business Administration Room 10 - Cole Hall Des Moines, Iowa 50311  | Dr. Richard Peebler, Director         | (515) 271-2871 |
|        | University of Iowa<br>Small Business Development Center<br>College of Business Administration<br>Room 24 - Phillips Hall<br>Iowa City, Iowa 52242   | Dr. Emmett J. Vaughan, Director       | (319) 353-3420 |

| Region | University and Address  | Contact   | <u>Telephone</u>                       |
|--------|---|---|--|
|        | University of Northern Iowa<br>Small Business Development Center<br>School of Business<br>121 Seerley Hall<br>Cedar Falls, Iowa 50613       | <br>Dr. Dennis R. Wubbena, Director   | (319) 273-2696                         |
|        | Small Business Development Center<br>of Nebraska<br>Office of the State Director<br>University of Nebraska - Omaha<br>Omaha, Nebraska 68182 | Mr. Robert Bernier, State Director<br>Mr. Sterling Kent, Assistant Director<br>Mr. Eduardo Zoncan, Asst. Dir., Counseling | (402) 554-2521<br>554-3291<br>554-3291 |
|        | UNIVERSITY OF NEBRASKA - OMAHA* Small Business Development Center 1313 Farnam-on-the-Mall Cmaha, Nebraska 68182                             | Mr. Fred Layberger, Director  | (402) 554-3291                         |
|        | Chadron State College<br>Small Business Development Center<br>Chadron, Nebraska 69337   | Mr. Cliff Hanson, Director  | (308) 432-4451                         |
| VII    | Kearney State College<br>Small Business Development Center<br>Kearney, Nebraska 68847   | Ms. Amy Lease, Director   | (308) 236-4391                         |
|        | University of Nebraska - Lincoln<br>Small Business Development Center<br>College of Business Administration<br>Lincoln, Nebraska 68508      | Dr. Robert Justis, Director   | (402) 472-3276                         |
|        | Wayne State College<br>Small Business Development Center<br>Wayne, Nebraska 68787   | Ms. Joan Geise, Director  | (402) 375-2200                         |

|     | Region | University and Address   | Contact                       | Telephone      |
|-----|--------|--|-------------------------------|----------------|
|     | VIII   | UNIVERSITY OF UTAH* Small Business Development Center Graduate School of Business Salt Lake City, Utah 84112   | Mr. Richard Haglund, Director | (801) 581-7905 |
|     |        | Southern Utah State College<br>Small Business Development Center<br>Cedar City, Utah 84720   | Dr. Harold Hiskey, Director   | (801) 586-4411 |
|     |        | Utah State University<br>Small Business Development Center<br>Department of Business Administration<br>UMC 35  | Mr. Marion Bentley, Director  | (801) 750-2283 |
| · . | 77.00  | Logan, Utah 84322  |                               |                |
|     | X      | WASHINGTON STATE UNIVERSITY* Small Business Development Center 441 Todd Hall Pullman, Washington 99164   | Mr. Edward V. Owens, Director | (509) 335-1576 |
|     |        | Eastern Washington University<br>Spokane Area Basic Service<br>Small Business Development Center   | Mr. Jim Neavill, Director     | (509) 456-4259 |
|     |        | Bon Cuilding - 7th Floor<br>Howard and Riverside<br>Spokane, Washington 99201  | <b>o</b>                      |                |
|     |        | Washington State Department of Commerce<br>and Economic Development<br>Small Business Development Center<br>Small Business Division<br>101 General Administration Building | Mr. Doug Clark, Director      | (509) 753-5614 |
|     |        | Olympia, Washington 98504  |                               |                |

Please send all corrections to: Terry E. Nelson
U.S. SMALL BUSINESS ADMINISTRATION
SBDC Section - Room 602-C
1441 L Street, N.W.
Washington D.C. 20416

# SBDC

SMALL BUSINESS DEVELOPMENT CENTER

UNIVERSITY

#### FACT SHEET

GOVERNMENT

The Small Business Development Center (SBDC) program was started in 1977 as a pilot program, and now there are Centers located at 16 Universities in 15 states.

PRIVATE SECTOR

Each Center is headquartered on a University campus and is designed to serve as a focal point for the coordination of Federal, State, local, University, and private resources to aid small businesses within a single area, at no cost to the small business.

These varied resources are utilized to counsel and train small business owners/managers in dealing with financial, marketing, production, organization, engineering, and technical problems. Clients are also assisted in developing feasibility studies, business plans, cash flows, and financial statements.

A business need not have an SBA loan to qualify for assistance at a Small Business Development Center. Requests for assistance may be made either through the District Small Business Administration Office in those states having an SBDC, or directly to the appropriate SBDC listed on the reverse.

WORKING TO HELP SMALL BUSINESS

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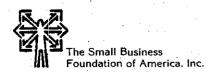
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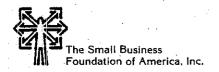
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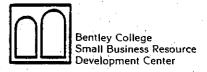
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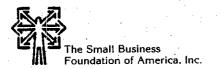
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Conference Attendees: page 4

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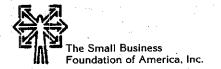
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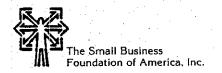
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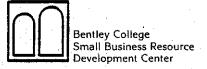
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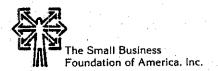


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