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129. INTERNATIONAL VENTURE RESEARCH — 9, 21, 37, 78, 84, 99
11 Peavey Road
Chaska, MN 55318
Dr. John H. Nelson, VP (612) 448-3113

New product development; process engineering; home economics; market research; economic research; quality control. Equipped with microbiological laboratory, information library, computer terminal facilities, pilot plants, prototype evaluations.

130. INTERPRISE CORPORATION — 14, 78, 117
P. O. Box 947
Framingham, MA 01701
Lawrence Levy, Pres. (617) 875-4131

International management consulting; product development financing; mergers and acquisitions; license arrangements and joint ventures.

131. INTERTECHNOLOGY/SOLAR CORP. — 8, 27, 45, 47, 95, 103
100 Main Street
P.O. Box 340
Warrenton, VA 22186
George C. Szego, Pres. (703) 347-7900

Complete solar heating and cooling capability including design analysis/optimization trade-off studies; prototype hardware for thermal storage, collectors, controls, etc.; test and evaluation; operation and data collection. Energy, power and environment studies, impact statements and computer simulation models.

132. IONICS, INC. — 17, 34, 41, 49
65 Grove Street
Watertown, MA 02172
Wayne A. McRae, VP/Research (617) 926-2500

Electrochemistry, charged (ion-exchange) membranes, water treatment; desalination of water by electrodialysis; real-time monitoring of total oxygen demand, total organic carbon, total carbon and other parameters in process streams; develop membranes for new applications; preparation of instruments for commercial production and commercial manufacture of equipment.

133. ISRAELI INDUSTRY CENTER FOR R&D (IICRD) — 12, 47, 70
33 Ogarit Street
Tel-Baruch, Tel-Aviv, ISRAEL
(03) 47 15 69

Purpose of the IICRD is to advance and promote high technology of the industry in Israel and to encourage industrial R&D. IICRD incorporates most of the R&D and high technology companies in Israel, and has close working connections with scientists dealing with applied research, Universities and the Government of Israel.

134. ITHACO, INC.
735 W. Clinton Street
Ithaca, NY 14850
E. W. Seymour

(No expertise submitted at time of printing)

135. J-TEC ASSOCIATES, INC. — 5, 8, 19, 20, 28, 44, 45, 48, 70, 83, 89, 95, 103, 123
317 - 7th Avenue, S.E.
Cedar Rapids, Iowa 52406
Theodore A. Johnson, Pres. (319) 366-7511

Engineering and manufacturing. Research. Flowmeters, spirometer (a small flowmeter for measurement of human lung capacity); anemometer; air speed indicator; water current meter for measurement of fluid flow to depths of 500 feet; flowmeter for measurement of gas and liquid flow rates in pipes; automobile fuel metering systems.

136. JACOBS-WINSTON LABORATORIES, Inc. — 9, 27, 40, 55, 65, 84, 99, 115
25 Mt. Vernon Street
Ridgefield Park, NJ 07660
Marvin E. Winston, V.P. (212) 962-6536

Food chemistry, including microbiology and pesticide residue tests using gas chromatography; specializing in macaroni, noodles, fish, egg, meat products; also sanitation.

137. JENIKE & JOHANSON, INC. — 9, 19, 23, 45, 47, 49, 52, 54, 88, 110, 112
2 Executive Park Drive
N. Billerica, MA 01862
John W. Carson, V.P. (617) 667-5136

Consulting engineers specializing in the storage and controlled flow of bulk granular solids, with applications in problems involving bin flow, feeders, plant design, stand pipes, compaction, chute design, moving bed reactors, and loads on bin walls. Also perform contract research in the above fields and sell a line of test equipment used to measure solids flow properties.

138. JOHNSON ENGINEERING CO. — 15, 24, 27, 30, 45, 56, 77, 79, 82, 94, 103, 104, 108, 114, 116, 119
17 N. Drexel Avenue
Havertown, PA 19083
Herbert G. Johnson (215) 446-4540

Extensive background in solid-phase forming of metals and polymers, valves and piping components; and in power generation, materials and recycling.

139. THEODORE JONAS/ASSOCIATES LTD. — 10, 12, 19, 24, 27, 34, 45, 51, 52, 53, 56, 60, 75, 92, 95, 103, 107, 109, 119, 123
2009 N. 14th Street——Suite 201
Arlington, VA 22201
James T. Ferguson, Associate
(703) 527-8555

Consultants in government-sponsored R&D programs in energy, environment (air, land and water), analytical instrumentation, land use, chemistry and chemical engineering.

140. JONES ASSOCIATES — 23, 36, 38, 47, 48, 60, 61, 65, 95, 109
11 West Pennsylvania Avenue
Baltimore, MD 21204
Lawrence E. Jones, Pres. (301) 296-7111

Offers innovative professional engineering analysis, planning and design services to industry and government in ecology, civil engineering, environmental engineering, technology transfer, regulatory analysis, and technology management. Current assignments for clients in the public and private sectors include comprehensive technical and program analyses of environmental regulations promulgated pursuant to the Water Pollution Control Act, the Safe Drinking Water Act, and the Toxic Substances Control Act.

141. KAR LABORATORY — 9, 12, 15, 18, 81, 99, 119
1711 Merrill Street
Kalamazoo, MI 49008
John Karnemaat, Director (616) 381-9666

Product Development. Waste Utilization. Environmental Monitoring.

142. ALAN B. KAMMERMAN — 93
11623 Kelvin Avenue
Philadelphia, PA 19116
(215) OR 7-3955

R&D in Physics.

143. DR. E. M. KIPP
Suite A, Station Square Two
Paoli, PA 19301
(215) 647-4631

14, 17, 19, 24, 27, 45, 53, 69, 76, 79, 82, 92, 109, 115

R&D Management including intracorporate problems. Science and Technology including energy resources and utilization, new product and process innovations, and Chemical Engineering. Lubrication Engineering Sciences including all aspects such as custom formulations, training programs and consultation.

144. CHARLES KLABOSH CO.
815 S. Main Street
P.O. Box 5690
Jacksonville, FL 32207
Charles Klabosh (904) 396-2180

6, 7, 10, 22, 25, 26, 46, 64, 70, 71, 88, 91, 108, 119

Capabilities in Aerothermodynamics of propulsion flight test engineering and management; Configuration management of large complex system from concept to implementation especially within an existing force structure; Operations management of manned activities within engineering or physically encumbered environments. Design of digital logic controlled manipulator systems; Electric powered surface vehicle design, operations and logistics. High performance combustion system design; engines piston and gas turbine installation design and performance analysis.

145. L'GARDE, INC.
1555 Placentia Avenue
Newport Beach, CA 92660
Alan R. Hirasuna, Director/Administration
(714) 645-4880

5, 6, 24, 44, 47, 70, 79, 113

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146. LABCONCO CORPORATION
8811 Prospect Avenue
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John N. McConnell, VP/Marketing & Sales
(816) 363-6330

9, 48, 49, 84

Laboratory equipment and apparatus.

147. LANCASTER LABORATORIES, INC.
2425 New Holland Pike
Lancaster, PA 17601
Dr. Earl H. Hess, Pres. (717) 656-2301

9, 13, 15, 17, 23, 24, 35, 54, 55, 66, 84, 91, 95, 99, 106, 110, 119

Chemical analysis and microbiological testing and consulting service to agriculture, agribusiness and industry. Quality Control. Air and water pollution monitoring and control. Wastewater treatability. Waste and by-product utilization. Potable and wastewater analysis. Consulting in polymer research, development and analysis. Computer services. Analysis of pharmaceuticals.

148. LIFE SYSTEMS, INC.
24755 Highpoint Road
Cleveland, OH 44122
Dr. R. A. Wynveen, Pres. (216) 464-3291

17, 21, 28, 40, 41, 44, 45, 49, 51, 70, 84, 95, 108

Major technical strengths in the following areas: Air Revitalization Systems including carbon dioxide concentration and reduction, electrochemical oxygen and hydrogen generation (water electrolysis and solid electrolyte

(continued)

electrolysis), removal of oxidizable contaminants, nitrogen generation, humidity control; Water and Waste Treatment Systems including water disinfection and sterilization, ultrafiltration, reverse osmosis, ozonation, ion exchange and hypochlorination; Computer-oriented instrumentation including control, monitor, data acquisition and sensors; Electrochemical applications to processes and sensors (total organic carbon, chemical oxygen demand, biocides, gas contaminants).

149. LINK ENTERPRISES, INC. — 4, 20, 38, 39, 50, 72, 85, 103
P. O. Box 11073
Montgomery, AL 36111
Katherine S. Link, President
(205) 288-2906, 288-7002 or 281-7267
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Highway 31 South, Hope Hull, AL

Consultant and Training Services. Specialize in custom design of training materials or programs to fit the special needs of the customer. Programs produced in slide/tape, filmstrip or microfiche format. Design and produce handouts or manuals.

150. LINKABIT CORPORATION — 20, 21, 86, 93
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San Diego, CA 92121
Dr. I. M. Jacobs, Pres. (714) 453-7007

Systems studies; software and hardware manufacturing; digital communications with emphasis on satellite communications; error-correcting coders and decoders; modulation-demodulation techniques; television and voice data compression; applications of microprocessors to communication; optical fiber communication.

151. LITRON LABORATORIES, LTD. — 9, 12, 13, 17, 21, 32, 35, 45, 72, 81, 84, 110
1351 Mt. Hope Avenue
Rochester, NY 14620
Dr. Andrew M. Tometsko, Pres.
(716) 275-4008

Research and development capabilities in chemical, biological and computer sciences. Biomedical interests involve drug design, structure-function relationships in biological systems and applied enzymology. Evaluations of toxicity, mutagenicity, and carcinogenicity of chemicals are carried out routinely.

152. LITTLETON RESEARCH & ENGINEERING — 2, 26, 30, 32, 47, 63, 70, 77, 87, 89, 107, 112, 115
95 Russell Street
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F. Everett Reed, Pres. (617) 486-3526 or 3039

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153. LOMBARD SYSTEMS, INC. — 2, 20, 21, 22, 28, 32, 86, 100, 101, 108
1196 Andre Avenue
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R. G. Baron, Pres. (415) 965-3682

Technical disciplines on measurement, communication, processing and control. Principle areas of expertise are in acoustic signal and data processing for undersea and nuclear surveillance, navigation and guidance, geophysical data acquisition and processing, process monitoring and control, and data and information processing systems. Provides turkey systems and technical/management services to government and industry.

154. C. H. LUHRS & CO. — 42, 49
P. O. Box 1786
S. Hackensack, NJ 07606
C. H. Luhrs (201) 772-0620

Microwave devices.

155. MBAssociates — 2, 5, 6, 7, 15, 17, 19, 103, 108, 121
Bollinger Canyon Road
P.O. Box 196
San Ramon, CA 94583
Robert Mainhardt, Pres. (415) 837-7201

Passive Countermeasures Systems, Dispensers, Flare and Chaff, Small Ordnance Items, Pyrotechnics, Electro-Mechanical Systems, R&D.

156. MERADCOM — 60
(U.S. Army Mobility Equipment
R&D Command)
Small Business and Economic Utilization Advisor
Ft. Belvoir, VA 22060
ATTN: DRDME-ZV
(703) 664-2482

157. McLAUGHLIN RESEARCH CORP. — 22, 32, 44, 45, 50, 68, 87, 97, 108
1110 Spring Street
Silver Spring, MD 20910
Daniel Scherr (301) 585-7100

Systems engineering; Energy system analysis; Navy claims prevention and analysis; Management information systems; Configuration management; Integrated logistic support systems; Electronic data processing; Technical publications; Film production-technical, training and publicity. In conjunction with the NavOrd and NavShips, develops the ORDLIS and SECAS systems and the implementation handbooks for those systems.

158. Mac ARTHUR RESEARCH CO.
RD #2, Box 264
Malvern, PA 19355
Arthur MacArthur

(No expertise submitted at time of printing)

159. A. Mac DONALD ENGINEERING — 40, 45, 82
1235 Ashland Avenue
Wilmette, IL 60091
A. MacDonald (312) 256-4688

Energy conservation; Metal processing; Industrial foundries die casting. Utilization of electric energy from sources that are not constant. Supply varies.

160. MAN FACTORS, INC. — 1, 25, 26, 28, 38, 39, 47, 64, 66, 70, 72, 91, 96, 102, 108
4433 Convoy Street
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Peter H. Selby, Exec. VP (714) 277-2611

Primarily a human factors consulting, R&D firm. Specializing in human factors engineering, life support, personnel and training requirements. Provides such services as: Human engineering of commercial products for safety and user effectiveness; analysis of user (human) requirements in building design, office and plant layout, employee effectiveness and safety; design of operator/maintainer work stations for maximum cost-effectiveness; analysis of training requirements and design of training programs,
(continued)

including development of performance-oriented training objectives and course curricula, training aids, content and design of presentation methodology; investigations of work capabilities of divers at various depths, performing various tasks; requirements and layout analysis of displays and controls of man-operated systems; analysis of environmental hazards and their effects.

161. MAN-SYSTEMS, INC. — 12, 23, 61, 64, 91, 102
3107 McDow Avenue
Huntsville, AL 35805
Edward L. Saenger, Pres. (205) 536-3983

Primarily specializing in Human Factors Engineering, Evaluation of Environmental Hazards and Industrial/Graphics Design.

162. MAROTTA SCIENTIFIC CONTROLS, Inc. — 28, 47, 77, 78, 88, 108, 112A, 113A
Boonton Avenue
Boonton, NJ 07005
William T. Browne, Jr. (201) 334-7800, Ext. 275
Director of Sales & Marketing

(A) The development, design and manufacture of valves, electro-hydraulic and electro-pneumatic systems. (B) The design and fabrication of hydraulic power units up to and including 300 HP (this work performed at our subsidiary company, General Hydaulics Corp., Huntsville, AL). (C) High pressure, high flow test capability (gaseous nitrogen or standard hydraulic fluids and water). The high pressure pneumatic facility has pressures up to and including 15,000 PSIG and instantaneous flow rates up to 40,000 SCFM. Pressures-Oil pressures to 5,000 PSIG; flow rates to 150 gallons per minute. Water flow rates to 200 gallons per minute. (D) Environmental/temperature testing during pressure of flow tests. (E) Limited subsea/depth component testing. AREAS OF INTEREST: (1) ENERGY: a) Nuclear Power; b) Solar; c) Coal Conversion; d) Offshore oil/gas. (2) BASIC METALS: a) Aluminum sheet or foil; b) Steel; c) Specialty non-ferrous materials. (3) TRANSPORTATION: a) Aircraft; b) Ships; c) Spacecraft; d) Road vehicles; e) Track vehicles. (4) SPECIAL MACHINERY: a) Force/load simulators; b) Positioning, speed or rate controls; c) High temperature, corrosion, high pressure controls.

163. MARTIS ASSOCIATES — 2, 3, 5, 6, 7, 9, 14, 20, 21, 22, 24, 25, 26, 27, 28, 29, 30, 31, 32, 34, 37, 40, 44, 45, 47, 48, 49, 56, 57, 58, 60, 63, 67, 68, 70, 74, 76, 78, 79, 80, 82, 88, 90, 93, 95, 99, 100, 101, 103, 107, 108, 109, 111, 112, 112A, 113, 113A, 114, 116, 117, 118, 121
618 E. 10th Street
Berwick, PA 18603
Jerome M. Martis, Sr. (717) 759-8618

Oriented in support functions in engineering, estimating, cost control and project management in high technology areas involving energy systems, aero-space, vehicles in special dynamic transportation modes, structual dynamics, advanced materials and stress studies of advanced structures for aerospace. In general, interested in complete projects that requires technical and cost management and that requires organized team cooperation to get a program on a planned schedule involving a total information system.

164. MASON RESEARCH INSTITUTE — 12, 13, 17, 21, 30, 32, 81, 84, 110
57 Union Street
Worcester, MA 01608
Dr. John C. Landon, Pres. (617) 791-0931

Biomedical Research, Toxicology, Pathology, Reproductive Physiology, Drug and Chemical Safety and Efficacy Testing, Biomedical Data Processing.

165. MASSACHUSETTS SCIENCE AND TECHNOLOGY FOUNDATION — 12, 14, 19, 45, 48, 60, 75, 78, 103, 109, 117, 119, 123
10 Lakeside Office Park
Wakefield, MA 01880
Irving Sacks, Acting Director (617) 246-1250

Service agency dedicated to furthering the economic well-being of Massachusetts through improved liaison with the outstanding scientific and industrial communities in the Commonwealth. Within the scope of science and technology, activities may take many forms, but in each instance, the main objective will be to solve unavoidable and critical technical problems, and stimulate the general economy. It is the policy of the Foundation not to duplicate services and facilities available elsewhere within the Commonwealth, but rather to perform its function through the medium of existing talent and resources wherever possible. ACTIVITIES INCLUDE: Technology Exchange; Advisory Service; Program Management; Technology Grants; Study Initiation; Meeting Support.

166. MASSDESIGN ARCHITECTS & PLANNERS — 27, 45, 61, 97, 103, 109
138 Mt. Auburn Street
Cambridge, MA 02138
Gordon F. Tully (617) 491-0961

Energy Conservation Consultants. Energy; Graphic Arts; Publishers; Solar Energy; Technology Transfer.

167. MATACHEM RESEARCH CORP. — 17
432 Cherry Hill Blvd.
Cherry Hill, NJ 08034
Dr. Ralph Matalon (609) 667-8233

Chemistry. Manufacturer of perfume.

168. MATHEMATICAL SCIENCES NORTHWEST — 37, 45, 48, 74, 80
P. O. Box 1887
Bellevue, WA 98009
Peter H. Rose, Pres. (206) 827-0460
G. F. Kugler, VP/Administration
High energy gas laser technology; fusion technology; economic studies; environment, resource conversion and engineering studies.

169. MEGA ANALYTICAL RESEARCH SERVICES — 5, 40, 47, 77, 90, 107
11499 Columbia Pike
Silver Spring, MD 20904
Dr. Richard E. Dame (301) 622-4030

Specializes in design and analysis of prototype systems on a dedicated client basis including mechanical, electrical design of spacecraft systems, hydrospace systems, optical instruments and remote manipulator devices. Fabrication, test and evaluation of experimental verification units. Structural, thermal and mechanical R&D.

170. MERCURY COMMUNICATIONS — 97
730 Mission Street
Santa Cruz, CA 95060
Catherine Carmel, VP/Marketing (408) 425-8444

High-technology business publications and consulting.

171. MET ELECTRICAL TESTING CO., Inc. — 12, 26, 40, 49, 111
916 W. Patapsco Avenue
Baltimore, MD 21230
Leonard Frier, Pres. (301) 354-2200

Biomedical Sciences. Instrumentation Consultants. Electrical Engineering. Laboratory and Industrial Equipment. Electrical Testing.

172. METAL BELLOWS CORP. 6, 12, 28, 49, 70, 88, 108, 116
1075 Providence Highway
Sharon, MA 02067
Elton M. Tucker, Assistant Division Mgr.
(617) 668-3050, Ext. 118

Design, development and production of metal bellows components and systems for sealing, pumping, sensing and controlling in nuclear, medical, aerospace and industrial process applications. Application of advanced technology to precision forming, brazing and welding of foil thickness metals.

173. METEX CORPORATION 124
970 New Durham Road
Edison, NJ 08817
Bertram R. Rashkow (201) 287-0800

Designs, engineers, manufactures and sells knitted wire mesh products for a great many widely diverse industrial applications. Primary end use applications include EMI/RFI shielding, shock-mounts, flame arrestors, mist eliminators, filters, noise attenuators and many others.

174. MILMARK RESEARCH, INC. 9, 13, 17, 35, 66
P. O. Box 87
Bernville, PA 19506
Dr. Sheldon L. Clark (215) 488-6002

Industrial hygiene (laboratory services), toxicology, including drug screening and quantitation. Biological and biochemical research, including enzymes, lipids, steroids, proteins, immuno-chemical analysis, tissue cultures. Product formulation, testing and manufacturing for private labels.

175. MOLECULON RESEARCH CORP. 3, 9, 17, 23, 24, 35, 41, 47, 50, 51, 63, 65, 73, 74, 79, 93, 94, 99, 103, 105, 106, 109, 110, 113, 124
139 Main Street
Cambridge, MA 02142
Arthur S. Obermayer, President
(617) 547-2353

Specializes in research, development and consulting in chemistry polymers and allied fields. These services, performed for private industrial clients and for government agencies, range from feasibility studies and product development, to problem solving, chemical engineering investigations, and process development. Facilities include well-equipped laboratories for conducting chemical and physical experiments as well as facilities for pilot scale unit operations including film casting, fabric coating, extraction processes, emulsification, spray drying, mixing, filtration, sifting, extrusion, purification, grinding, etc. Manufactures POROPLASTIC^{R} film and SUSTRELLE^{TM}powder. These polymeric materials are best described as a solid composed mostly of liquid or alternatively, as a molecular sponge. Amounts ranging from 70% to 98% of almost any liquid can be held within the cellulose triacetate matrix of which Poroplastic or Sustrelle is composed. A variety of procedures can be used to control the rate of mechanism by which a liquid or precipitated solid can be released from this polymeric matrix. Product applications are in a variety of consumer, industrial and technical product applications such as controlled release of fragrances, flavors, medicinals and pesticides; and the separation of biological fluids and industrial liquids.

176. MONA INDUSTRIES, INC. 9, 17, 18, 29, 51, 55, 66, 67, 68, 70, 75, 79, 91, 94, 95, 96, 99, 106, 110, 116
65 E. 23rd Street
Paterson, NJ 07524
Dr. Karl Heyman, VP/R&D
(201) 274-8221, Ext. 12

Manufacture of organic synthetic chemical specialties.

177. MORRIS & WARD
5817 Plainview Road
Washington, DC 20034
Dr. Alan D. Morris (301) 320-4900

40, 47, 65, 75

Technology assessment. Power Plant Siting. Mechanical, electrical and hydraulic systems. Science and law.

178. WILLIAM M. MOSCRIP
Route 2, Box 474
Fredericksburg, VA 22401
(703) 775-7207

16, 47, 53, 72A, 74, 79, 87, 94, 121, 123

Inventor. R&D in mechanical/electrical/materials science area. Naval science; Naval weapons; interior ballistics; guided projectiles. Hardware prototype development. Prestressing refractory brittle materials to be used in gun barrels; projective/missile control fin actuator. Wind energy conversion. Stirling engine design; gas turbine design; synthetic fuel processes; thermal energy storage; heat pipe technology; solar pond design. High temperature ceramics; amorphous metals. Machine design; automotive design; fluid power generation; ship design, high speed hydrofoils. Gun design technology; precision guided ordnance; high energy lasers.

179. MULTISYSTEMS, INC.
1050 Massachusetts Avenue
Cambridge, MA 02138
Carole J. Berkson (617) 864-5810

(No expertise submitted at time of printing)

180. NATIONAL TESTING SERVICES
1905 Chapel Hill Road
Durham, NC 27707
Carol Hill

(No expertise submitted at time of printing)

181. NAVAL AIR DEVELOPMENT CENTER
Street & Jacksonville Roads
Warminster, PA 18974
Rose G. Mandrack

(No expertise submitted at time of printing)

182. NORTHWEST RESEARCH AND COUNSELING SERVICE
P. O. Box 461
Richland, WA 99352
Amos F. Warren, General Manager
(509) 967-3684

3, 24, 27, 96, 99, 108, 113, 114

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183. O'DONNELL & ASSOCIATES, INC.
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Pittsburgh, PA 15232
William J. O'Donnell, President
Ray G. Fasiczka, Vice President
(412) 687-7715

1, 2, 19, 21, 24, 45, 47, 63, 79, 82, 88, 93, 96, 103, 107, 112, 113

Engineering design and analysis services. Activities include stress analysis and certification of components, dynamic and seismic analysis, elastic and plastic analysis, nuclear fuel studies, reliability analysis, systems
(continued)

analysis, fatigue and failure analysis. High pressure and high temperature component analysis and criteria development.

184. OPTELECOM, INC. — 20, 25, 45, 74, 86, 90, 93, 103, 105, 106, 121
15940 Shady Grove Road
Gaithersburg, MD 20760
William H. Culver, Pres. (301) 948-4232

Manufactures and designs modulators, semiconductor lasers, laser arrays, high brightness illuminators, optical fibers, fiber optic cables, solar concentrators, and communications systems.

185. OTISCA INDUSTRIES, LTD. — 45
P. O. Box 186
LaFayette, NY 13084
Clay D. Smith, Pres. (315) 475-5543

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186. PACIFIC SIERRA RESEARCH CORP.
1456 Cloverfield Blvd.
Santa Monica, CA 90404
Richard J. Boberg (213) 828-7461

(No expertise submitted at time of printing)

187. PANDALAI COATINGS CO. — 17
618 Dahlia Drive
Monroeville, PA 15146
Krish Pandalai (412) 373-7493

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188. PAYNE, INC. — 5, 6, 7, 24, 27, 34, 45, 46, 47, 51, 57, 63, 77, 87, 103, 114, 119, 123
1933 Lincoln Drive
Annapolis, MD 21401
Peter R. Payne, Chmn. (301) 268-6150

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190. PENETRADAR CORP. — 6, 40, 42, 44, 70, 80, 86, 100, 101
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Niagara Falls, NY 14304
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191. PENN STATE ENGINEERING — 47
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State College, PA 16801
Norman A. Katz, Pres. (814) 238-5013

Civil engineering.

192. JAMES L. PLUMMER
8913 Footstep Court
Annandale, VA 22003
(703) 978-2911

14, 37, 45

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193. POLYSCIENCES, INC.
Paul Valley Industrial Park
Warrington, PA 18976
Dr. B. David Halpern, Pres.
(215) 343-6484

12, 13, 17, 24, 33, 43, 81, 94

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194. PRESEARCH, INC.
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2, 21, 22, 23, 25, 32, 40, 45, 47, 48, 58, 64, 65, 68, 71, 77, 80, 81, 87, 88, 89, 93, 99, 103, 108, 121

Performs studies and analyses and provides inputs for management decision-making; largely for the Department of Defense. Specific areas include naval warfare; strategic studies and projections; resource management (manpower, personnel and training, costing); and data processing support including systems analysis and programming.

195. PRODUCT RESOURCES INTERNATIONAL
90 Park Avenue
New York, NY 10016
Eugene F. Whelan (212) 682-2966

3, 10, 17, 18, 35, 69, 109

Represent selected inventors on a no-fee, share-of-the-action basis. Also conducts invention-searches on behalf of companies in return for a fee paid by the company(s). (The inventor or technology owner pays nothing.)

196. PRODUCTION COMPONENTS, INC.
Building I, El Tesoro Road
P.O. Box 7
Ranchita, CA 92066
E. S. Christensen, Pres. (714) 782-3339

45, 46, 47, 76, 103, 118, 123

Precision Machining——Tool and Die work. Thirty-two years in business of designing and building specialized machines-dies-equipment and processes. Holder of patent on thermal engine. Others pending.

197. PYROMET INDUSTRIES
595 Industrial Road
San Carlos, CA 94070
Tom Hikido, Vice President
(415) 591-7161, Ext. 35

3, 6, 7, 9, 15, 16, 19, 24, 45, 46, 47, 49, 74, 76, 79, 82, 88, 99, 103, 113, 119, 121

Brazing and heat treating. Metallurgical research & development. Production of aerospace hardware. Refurbishment of jet aircraft engine parts.

198. QUALITY BAKERS OF AMERICA CORP. — 54
1515 Broadway
New York, NY 10036
Dr. Simon S. Jackel, Vice President
(212) 790-9225

Full service laboratory and consulting facilities for bakery foods and for application of ingredients, processes and products in the baking industry.

199. QUEST RESEARCH INTERNATIONAL, Inc. (formerly Howe-Baker Engineers) — 9, 17, 19, 45, 48, 53, 55, 66, 92, 95, 99, 106, 110
P. O. Box 478
Tyler, TX 75710
Tom H. Cheavens, Research Director
(214) 597-4174

Process research, refining and petrochemicals; combustion analytical services; industrial hygiene; waste water; petroleum products.

200. RAD SERVICES, INC. — 26, 48, 66, 70, 95
9381 "C" Davis Avenue
Laurel, MD 20810
Edward Wellner, Operational Manager
(301) 953-9583

Transportation, packaging, storage and disposal of radioactive and chemical waste. Maintenance, calibration, repair, leasing, purchasing and sales of radiation instrumentation. Radioactive laundry service and environmental monitoring services including consultation, instrumentation and TLD, film badge dosimetry.

201. RADIATION MANAGEMENT
Science Center Building Two
3508 Market Street—Suite 30
Philadelphia, PA 19104
Bernard T. Geehan

(No expertise submitted at time of printing)

202. E. RAU ENTERPRISES — 14, 15, 17, 18, 45, 61, 103
40 Salisbury Avenue, Stewart Manor
Garden City, NY 11530
(Mailing address: P.O. Box 443
Floral Park, NY 11001
Dr. Emil D. Rau, President
(201) 440-3277 or (516) 488-2796

Saline chemicals. Fermentation. Wood chemistry. Coal chemistry. Agricultural systems. Solar energy.

203. REMTECH, INC. — 2, 5, 6, 7, 27, 32, 40, 45, 47, 57, 63, 74, 80, 90, 93, 95, 101, 103, 108, 114, 123
2603 Artie Street, Suite 21
Huntsville, AL 35805
Charles E. Fuller, VP (205) 536-8581

Firm is qualified to conduct programs in Energy Transfer, Fluid Mechanics, Environmental Control, and System Analysis. Experience includes Combustion, Gaseous Radiation, and Aerodynamic Heating Analyses; Laser Doppler Velocimetry, Ground Test Support and Instrumentation Design; Building Noise Surveys conducted for the government, universities and industry. The company has amplified its technical capabilities for Solar Energy System Design, Building Heat Load Analysis, and Energy Resource/Conservation Studies.

204. RESEARCH DYNAMICS, INC. — 12, 41, 44, 93, 106
P.O. Box 65, Village Station
New York, NY 10014
Dr. Raymond DiMartini, Director

Electrochemistry, spectroscopy and biomedical instrumentation. Multi-disciplined research services are offered within these fields by utilizing contemporary microelectronics technology with novel interpretations of fundamental physical principles. Physical and chemical parameters of problems are investigated and interpreted in terms of up to date technological literature available and in terms of the development required to attain a specific goal or produce a specific device. Traditional approaches are critically reviewed and evaluated in relation to the interpretation developed.

205. ROCKVILLE CONSULTING GROUP, Inc. — 14, 37, 69, 72, 78, 102, 109, 117
505 Second Street, N.E.
Washington, DC 20002
Stuart A. Lichtman, President
(202) 543-1040

Support to venture capitalists and other investors dealing with high technology firms.

206. ROOT DEVELOPMENT CORP. — 9, 12, 17, 81
Orentreich Medical Group
909 Fifth Avenue
New York, NY 10021
Dr. Joseph H. Vogelman (212) 794-0835

Biomedical instruments and processes in endocrinology, heart measurements, thyroid responses, chemical responses. Measure blood levels, hormone levels, analysis of dermatological effects of household remedies on skin. Analysis of products for allergy potential. Computerized electrocardiagrams.

207. GEORGE KNOX ROTH
P.O. Box 811
Claremont, CA 91711
(714) 624-4801

(No expertise submitted at time of printing)

208. ROTHENBUHLER ENGINEERING CO. — 20, 28, 40, 47, 77, 101, 103, 112, 123
Rhodes Road
P.O. Box 192
Sedro Woolley, WA 98284
Howard Rothenbuhler, Pres. (206) 856-0836

Originally founded to build radio control systems for the Forest Products Industry, company has grown to manufacture bank alarm systems, intrusion detection, scanning and monitoring equipment and single side band radios as well as the Talkie Tooter remote 2-way radio. Engineering testing, consulting, and custom engineering and manufacturing in the electronics field are also offerred with recent emphasis on wind generators and energy conservation.

209. SGL INDUSTRIES, INC. 10, 44, 45, 76, 104
76 Euclid Avenue
Haddonfield, NJ 08033
Jonathan R. Lax, Vice President
(609) 429-7400

Manufacturers of electrical and electronic, metal and plastic products. Providers of industrial services. Divisions include:

SGL Batteries Manufacturing
14650 Dequindre
Detroit, MI 48212
(313) 868-6410

Specializes in producing lead-acid batteries for "high-drain" applications such as in-plant equipment, electric-powered golf carts, electric automobiles, and trucks and buses——SGL Deep Cycle TM batteries.

SGL Auburn Spark Plug Co.
89 York Street
Auburn, NY 13021
(315) 252-9501

Manufactures Auburn TM line of engineered, specialty igniters, liquid level control electrodes, electric feed-throughs, motor terminals, and observation ports.

SGL WABER Electric
300 Harvard Avenue
Westville, NJ 08093
(609) 456-5400

Manufactures SGL Waber R electric power outlet boxes, SGL Power Master TM multiple outlet strips, and instrument transports.

SGL Electronics
300 Harvard Avenue
Westville, NJ 08093
(609) 456-7300

Manufactures high-performance magnetic components, magnetic laminations and cores.

SGL Printed Circuits
827 Black Oak Ridge Road
Wayne, NJ 07479
(201) 835-2765

Produces custom electronic circuitry.

SGL Abrasives
North Pitt Street Extended
Carlisle, PA 17013
(717) 243-3471

Manufactures grinding wheels and abrasive shapes, "super-speed" grinding wheels, and abrasive segments.

SGL Piping Systems
302 Falco Drive
Newport, DE 19804
(302) 995-6136

Manufactures Galaxie TM line of piping components (stub ends, coils and pipe elbows) used in petrochemical plants; integrated piping systems.

B & S Screw Machine Products
a division of SGL Industries, Inc.
204 North Chester Pike
Glenolden, PA 19036
(215) 724-4366

Manufactures metal and plastic screw machined parts.

SGL Plastics
Route 248
Nazareth, PA 18064
(215) 759-0280

Produces custom components parts, through the injection molding, profile, and sheet extrusion processes.

SGL Graphics
John Fitch Industrial Park
Warminster, PA 18974
(215) 672-3600

Produces fiberglass signs and displays through the proprietary Modulite ^{R} and Moducal ^{R} processes which offer superior resistance to vandalism, sunlight, chemical fumes and weather.

SGL Homalite
11 Brookside Drive
Wilmington, DE 19804
(302) 652-3686

Produces crystal-clear and colored plastic sheets, tubes, and rods. Homalite^{TM} plastics exhibit superior resistance to abrasion, impact and radiation. Produces Homalite-LR (low-glare) instrument panels and faceplates.

SGL Modern Creative
35 Market Street
Elmwood Park, NJ 07407
(201) 791-7700

Provides services to coat, frost and print glass and plastic containers.

SGL Modern Hard Chrome Service
Cover & River Roads
Pennsauken, NJ 08110
(609) 665-8600

Provides hard chromium, electroless nickel and copper plating.

SGL LUBE/systems
280 Midland Avenue
Saddle Brook, NJ 07662
(201) 791-6200

Manufacturer of automatic grease feeders used in industrial applications.

210. STD RESEARCH CORPORATION
150 E. Foothill Blvd.
P. O. Box "C"
Arcadia, CA 91005
Dr. John C. Cutting, VP
(213) 445-7000

5, 6, 7, 17, 19, 21, 23, 24, 27, 34, 40, 42, 44, 45, 46, 47, 48, 49, 52, 57, 58, 63, 68, 70, 74, 78, 79, 80, 93, 95, 103, 108, 111, 112, 113, 114, 119, 122, 123

Analytical modeling and systems analysis of open cycle MHD. Detailed thermodynamics analysis of combustion liquefication and gasification of coal. Interests: Conservation, oil, coal, gas utilization, solar energy.

211. SACHS/FREEMAN ASSOCIATES, INC.
5809 Annapolis Rd. ——Suite 512
Bladensburg, MD 20710
Ernest Freeman, President
(301) 927-4980

20, 21, 22, 25, 32, 40, 42, 44, 47, 61, 68, 71, 74, 80, 86, 90, 93, 100, 108, 121

COMMUNICATION SYSTEMS: Public Safety; Emergency Medical; 911; Radio Common Carrier. ENGINEERING SERVICES: EMC; Specifications and Stadards Development; ECM; Communication and Radar Systems Analysis; Electro-Mechanical Design; Laser/Optics; Design/Drafting. MANAGEMENT SCIENCES: ILS/CM/Training. COMPUTER SCIENCES: Systems Design and Specifications; ADP; Simulation/Modeling/Displays/ Analysis.

212. SAMANIE, INC.
P.O. Box 694
Alexandria, VA 22303
Anne B. Bryan

(No expertise submitted at time of printing)

213. SCIENTIFIC ASSOCIATES, INC.
1639 - 12th Street
Santa Monica, CA 90404
Dr. Eugene B. Nebeker, President
(213) 451-1344

23, 45, 47, 114, 123

Performs R&D and consulting services within the general field of chemical and mechanical engineering. Typical activities involve both theoretical and experimental work in fluid mechanics, heat and mass transport, and thermodynamics. Primary ongoing activities are in development of original concepts for oil spill skimming in high seas, rock excavation with water jets; and wind-energy conversion. The company has also been engaged in industrial consulting on environmental impact studies.

214. SEAWARD INTERNATIONAL, INC.
6269 Leesburg Pike
Falls Church, VA 22090
E. F. Daly, VP (703) 534-3500

48, 63, 77, 87, 89, 95

Development of equipment for control of marine pollution, particularly that due to oil and hazardous materials. Search and recovery of lost underwater objects. General ocean engineering.

215. SERVICE ENGINEERING ASSOCIATES
3960 Peachtree Road, N.E.
Atlanta, GA 30319
Clyde H. Gordon, Sr. Consultant
(404) 261-2050

27, 45, 65, 81

Consultants, energy conservation and management; industrial operation and maintenance; evaluation and field testing of products, methods and equipment relating to institutional sanitation.

216. SHAKER RESEARCH CORP. — 2, 6, 21, 26, 27, 40, 44, 45, 47, 51, 70 112, 115
Northway 10 Executive Park
Ballston Lake, NY 12019
John M. McGrew, Pres. (518) 877-8581

Structure and airborne vibration data processing; machinery and structural dynamics; high performance bearing design and analysis; lubrication; seal design and analysis; acoustic and mechanical vibration analysis; machinery design reviews; machinery failure protection.

216A. ALBERT SHAPERO — 14, 37, 39, 78, 102
Ohio State University
Columbus, OH 43210

As of May 1978, William H. Davis Professor of American Free Enterprise System, Ohio State University, Columbus, Ohio. Formerly, Professor of Management at the University of Texas at Austin, Austin, Texas since December 1966 and a member of the Graduate Faculty of the School of Library and Information Science. He has been Chairman of the University of Texas' Department of Management, visiting faculty member of the International Institute for the Management of Technology in Milano, Italy (IIMT), and Director of the Technology Management Division at Stanford Research Institute. At Stanford, he was principal investigator and project leader or participant in a large number of research projects. As Director of Technology Management Programs, he developed and headed a multidisciplinary research organization that was concerned with the application of systems approaches to the solution of complex problems.

217. SHEPARD LABORATORIES — 20, 21, 26, 28, 32, 40, 44, 46, 68, 69, 101, 108
19 Morris Court
Summit, NJ 07901
F. H. Shepard, Jr., Consulting Engineer
(201) 273-5255

Electronic-Electro-Mechanical Systems developed; computer peripherals; instrumentation & control; prototype construction.

218. RALPH L. SHERMAN — 12, 17, 80, 81, 93
1019 Coronado, #25
Imperial Beach, CA 92032
(714) 429-7966
d/b/a J. M. Richards Laboratory
15133 Kercheval Avenue
Grosse Point Park, MI 48230

Biophysics. Biochemistry. Bioengineering. In abstracto modeling of hormonal, biochemical and bioelectrical factors associated with nonperiodic oscillations of CNS excitability; they serve as a foundation for continuing research in quantifying brain function in health/desease. Mathematical analysis of longitudinal EEG studies in clinical patients.

219. SHRADER ANALYTICAL LABORATORIES — 9, 17, 18, 55, 92, 95, 110
3450 Lovett Avenue
Detroit, MI 48210
Dr. Stephen Shrader, Pres. (313) 894-4440

Analytical chemistry consultants. Specializing in identification of unknown materials——pollutants, drugs, contaminents in industrial products; experts in mass spectrometry and gas chromatography.

220. SIERRACIN CORPORATION — 5, 17, 44, 45, 48, 93, 94
12780 San Fernando Road
Sylmar, CA 91342
B. P. Levin (213) 367-6184

Applied research directed toward heatable, anti-reflective coatings applied directly on plastic or glass substrates usable in heatable transparencies. Additional efforts fall into the areas of solar energy research, life cycle testing, environmental testing and flight environment simulation.

221. SIGNATRON, INC. — 20, 23, 40, 80
12 Hartwell Avenue
Lexington, MA 02173
Dr. Julian J. Bussgang, Pres.
(617) 861-1500

Consulting, research, development and system studies in electronic communications, radar, signal transmission and reception, mathematical modeling, performance test and evaluation, special purpose electronic instrumentation, digital interfaces, expert review and testimony.

222. ANATOLE J. SIPIN CO., INC. — 2, 26, 40, 47, 48, 49, 66, 70, 95
425 Park Avenue South
New York, NY 10016
Anatole J. Sipin, President
(212) 689-2550

Instruments to monitor organic solvents, vinyl chloride, and other toxic gases and vapors, personal pumps, charcoal and other sorbent tubes, gas collection bags, and direct reading colorimetric dosimeter tubes. R&D on medical devices, energy conversion devices, non-destructive testing, ultrasonics.

223. C. BRANSON SMITH — 60
Planning & Analysis
U.S. DEPARTMENT OF ENERGY
20 Massachusetts Ave., N.W.
Washington, DC 20545

224. SOL ENERGY CORPORATION — 45
761 Rohde
Hillside, IL 60162
Joseph Kelly, Pres. (312) LI 7-5912

Solar energy research & development. Facility at Rutland, Illinois to use solar energy to manufacture photovoltaic cells and a general education facility open to the public.

225. SOLAR INVESTORS ASSOCIATES — 45, 103, 117
325 Prospect Avenue
Mamaroneck, NY 10523
A. W. Adler, President (212) 952-9400

Management and financial consulting. Venture capital with emphasis on alternative energy firms.

226. SOUTHWESTERN LABORATORIES — 9, 15, 17, 19, 24, 43, 48, 51, 54, 55, 59, 79, 82, 95, 99, 103, 106, 110, 112, 113
222 Cavalcade Blvd.
P.O. Box 8768
Houston, TX 77009
Joe W. Jeanes, P.E., President
(713) 692-9151

Materials, Environmental, and Geotechnical Consultation and Contract Research; Fundamental Testing and Analytical Services.

227. SPACE VECTOR CORPORATION
19631 Prairie Street
Northridge, CA 91324
Richard O. Rasmussen, President
(213) 886-6500

5, 6, 28, 32, 44, 63, 70, 103, 116, 118

Research rocket systems including analysis, structures, recovery, flight control, attitude control and separation systems. Exoatmospheric attitude control for spinning and non-spinning payloads. Gyro and gyroscopic platforms. Pneumatic actuators. Pulse irrigation systems for agriculture.

228. SPECTRA RESEARCH SYSTEMS
2212 DuPont Drive
Irvine, CA 92664
M. S. Sandhu, Pres. (714) 833-9088

6, 20, 32, 42, 44, 45, 47, 68, 70, 80, 86, 90, 93, 100, 101, 102

Independently owned high technology R&D organization with expertise in information processing, remote sensing, advanced sensors and processors, phenomenology studies, field measurements planning and data acquisition, processing and analysis. Primary areas of business include advanced systems studies, system synthesis, field measurements and image processing.

229. SPECTRIX CORPORATION
7408 Fannin
Houston, TX 77054
Dr. Harris A. Lichtenstein, President
(713) 790-1800

9, 12, 17, 21, 55, 70, 99, 106, 110

Multidisciplinary consulting firm of scientists and technologists founded in Houston in 1969. Laboratory operations were established in 1972 and focused upon chemical analyses for research and services in geochemical, environmental, biomedical, petroleum and petrochemical applications. In particular, provides analytical services for trace organic and inorganic compounds in water, air and body fluids. Product quality control for manufacturers and hydrocarbon characterizations for geochemical exploration also highlight some of their services. Research efforts include the development of methods for the analysis of toxic chemicals in drinking water. Spectrix is one of the few commercial laboratories in the country possessing a computerized gas chromatograph-mass spectrometer, the most powerful analytical instrument for the analysis of complex organic compounds. This instrument is capable of the combined tasks of first separating and then identifying components in a complex mixture.

230. SPECTRO-SYSTEMS, INC.
8000 Forbes Place
Springfield, VA 22151
Dr. Joseph V. Gaven, Jr., Pres. & Technical Director
(703) 321-9240

9, 17, 41, 45, 47, 50, 55, 90, 93, 101, 105, 106, 114

Electro-Optics; Photochemistry; Liquid Crystals; Remote Sensing; Geothermal Energy; Energy-related R&D.

231. SPRINGBORN LABORATORIES, INC.
(formerly DeBell & Richardson, Inc.)
Water Street
Enfield, CT 06082
Dr. Robert C. Springborn, Chairman & Pres.
(203) 749-8371, Ext. 217

3, 9, 12, 13, 14, 15, 17, 18, 23, 24, 34, 35, 36, 47, 50, 55, 78, 79, 81, 84, 94, 97, 103, 110, 111, 113, 117, 119

Research, development and engineering, market studies in plastics, chemical, and related fields; physical, analytical and biological testing.

232. STANDARD LABORATORIES, INC. 9, 17, 19, 23, 49, 99, 113
3322 Pennsylvania Avenue
Charleston, WV 25302
Dick Kelly, Technical Director
(304) 343-5173

Provides expert water and coal testing capabilities as well as innovative coal testing capabilities. Complete coal testing services include: sampling, proximate analysis, ultimate analysis of coal and coal ash, fluidity studies, and washability and/or preparation plant performance studies.

233. STANFORD RESEARCH INSTITUTE
1611 N. Kent Street
Arlington, VA 22209
Dr. William D. Theriault
(703) 524-2053, Ext. 366

(No expertise submitted at time of printing)

234. STEWART-TODD ASSOCIATES, INC. 12, 65, 66, 81, 96
No. 10 Valley Forge Executive Mall
530 E. Swedesford Rd., Suite #344
Wayne, PA 19087
Dr. W. Wayne Stewart, Pres. (215) 687-2030

Plan, develop and implement environmental health programs, nationally and internationally, including occupational medical programs; industrial hygiene surveys by certified Industrial Hygienists; toxicological test design, monitoring and interpretation. Biological and environmental health research, product safety and product liability. Expertise in training of occupational physicians, industrial hygienists and monitoring staff; augment client professional capabilities as needed.

235. T. E. STIVERS ASSOCIATES 47, 49, 60A
P. O. Box 608
Decatur, GA 30031
T. E. Stivers, Pres. (404) 378-1392

Basically R&D for mechanical processing of agricultural and food products and by-products.

236. STRUCTURE PROBE, INC. 3, 4, 9, 12, 16, 17, 24, 33, 43, 82, 94, 96, 106, 115
535 E. Gay Street
P.O. Box 342
West Chester, PA 19380
Dr Charles A. Garber, President
(215) 436-5400

Analytical and consulting laboratory equipped with some of the most advanced electron optical equipment available for materials analysis——including a combination Auger/ESCA/Scanning Auger Microprobe system for Surface Analysis plus electron microscopy (scanning and transmission), x-ray diffraction, and many other peripheral capabilities for complete materials research. Applications in failure and contamination analyses, on-line production problems, quality control, patent support, product liability in areas such as ceramics, metals, microelectronics, foods, fibers, cosmetics, air and water pollution.

237. SUGHRUE, ROTHWELL, MION, ZINN & MACPEAK 75
1776 K Street, N.W.
Washington, DC 20006
G. Franklin Rothwell (202) 293-7060

Law: Patents and Procurement.

238. TACHISTO, INCORPORATED — 44, 74
13 Highland Circle
Needham Heights, MA 02194
Gabrielle Kovarna Raff
Vice President/Marketing & Sales
(617) 444-9360

Design and manufacture TACII CO2 TEA and pulsed rare gas-halogen eximer lasers; custom high voltage Marx generators; pulsed high voltage power supplies for flashlamps and lasers; capacitor bank installations; trigger generators; high voltage spark gap switches; voltage dividers; current viewing resistors.

239. TALLEY INDUSTRIES, INC. — 1, 6, 9, 12, 17, 24, 25, 26, 27, 32, 40, 45, 47, 58, 61, 64, 65, 66, 68, 70, 78, 79, 80, 94, 95, 96, 98, 103, 107, 108, 111, 112, 113, 114
3500 N. Greenfield Road
P.O. Box 849
Mesa, AZ 85201
R. A. Rockow, President
Government & Technical Products Group
(602) 832-3830, Ext. 201

(No further expertise received at time of printing)

240. TECH DEVELOPMENT, INC. — 5, 6, 7, 45, 46, 47, 76, 123
2601 Timber Lane
P.O. Box 1400-0
Dayton, OH 45414
Robert G. Graham, Mgr. of Marketing
(513) 275-7426

Concerned with the research, design, development and fabrication of precision aerodynamic and fluid dynamics derived apparatus for aerospace, nuclear, medical and commercial aviation applications, including: design and fabrication of aircraft models for wind tunnel testing; compressed gas powered, tip-turbine driven, ducted axial flow fans for V/STOL aircraft scale model testing; propulsion simulation devices for aircraft model testing; inflation devices; sub-scale propellers; fluid pumps, turbomachinery; steam and air driven turbine and vane-type motors.

241. TECHMEDIA CORPORATION — 22, 27, 38, 45, 64, 71, 108
(formerly Proposal Management, Inc.)
121 North Orianna Street
Philadelphia, PA 19106
Charles A. Mirenda, Director of Marketing
(215) 574-0308

Proposal writing and management. WBS, LCC/DTUPC, C/SCS, systems engineering, management systems. Configuration management. Documentation. Editing and composition. Technical art. Printing.

242. TECHNI RESEARCH ASSOCIATES, INC. — 17, 23, 29, 45, 109
Professional Center Building
37 Easton Road
Willow Grove, PA 19090
Dr. Louis F. Schiffman, President
(215) 657-1753

Technology transfer. Research planning and management. Licensing. Acquisitions. Product development.

243. TECHNOLOGICAL INNOVATORS CO. — 15, 27, 34, 45, 48, 54, 64, 103, 107, 123
21,441 Highvale Trail
Topanga, CA 90290
Robert L. Woodbury, Chief Scientist
(213) 455-1721

Performs research, development and consulting in the field of Appropriate Technology (technologies that are ecologically and sociologically compatible), and require no petrochemical fuels, pesticides or non-renewable resources to make economic development possible.

244. TECHNOLOGY CLEARING HOUSE, INC. — 68
1105 Market Street——Suite 801
Wilmington, DE 19801
Ernest Breton, Pres. (302) 658-7831

Publishers of New Technology Index. Will index clients technology by function to permit retrieval of information on new technology on the basis of the needs that it satisfies.

245. TELEDYNE ENERGY SYSTEMS — 41, 45, 53, 73
110 West Timonium Road
Timonium, MD 21093
William C. Kincaide (301) 252-8220, Ext. 278

Engaged in the research and development and manufacture of electrochemical and thermoelectrical energy conversion devices, including water electrolysis systems, fuel cell systems, space power systems, and related equipment.

246. TENSOR INDUSTRIES, INC. — 2, 4, 6, 22, 23, 25, 32, 40, 44, 47, 58, 59, 60, 61, 64, 65, 68, 74, 77, 78, 81, 88, 89, 99, 100, 101, 108, 111, 112, 114, 118, 121
8415 Arlington Blvd.
Fairfax, VA 22030
Gaylord Leonard, Contract Mgr.
(703) 573-1204

R&D activities center around systems engineering, reliability and maintainability, and systems acquisition management. A wide variety of engineering, technical and management skills are represented on its staff. Company has no hardware products.

247. THERMOTRON CORPORATION — 14, 40
Kollen Park Drive
Holland, MI 49423
John J. Sexton, Pres. (616) 392-1491

Business Administration. Electrical Engineering.

248. TRANS-TECH, INC. — 9, 10, 16, 17, 20, 24, 40, 42, 43, 44, 79, 82, 93, 94, 99, 100, 111, 113
12 Meem Avenue
P.O. Box 457
Gaithersburg, MD 20760
A. C. Blankenship, VP/Engineering
(301) 948-3800, Ext. 73

Producers of Microwave Materials; Ferrites, Garnets, Ceramic Dielectrics; Custom Research and Development Facilities; Diamond Wheel Machine Shop.

249. TRANS-TECH, INC. — 9, 10, 16, 17, 20, 24, 40 42, 43, 44, 79, 82, 93, 94, 99, 100, 111, 113
12 Meem Avenue
P.O. Box 457
Gaithersburg, MD 20760
R. G. West, Sr. Staff Engineer
(301) 948-3800

Producers of Microwave Materials; Ferrites, Garnets, Ceramic Dielectrics; Custom Research and Development Facilities; Diamond Wheel Machine Shop.

250. TRANTECH CORPORATION — 97, 109
P. O. Box 310
Newton, MA 02160
Martin Himmelfarb (617) 964-0699

Publishers. Technology Transfer.

251. TREADWELL CORPORATION — 41, 45, 47, 48, 119
1700 Broadway
New York, NY 10019
J. A. Johnson, Sr. Vice President
(212) 262-3120

Integrated engineering-construction firm with expertise in the ferrous and non-ferrous metals industries. Also has unique qualifications in electrochemistry and is the only producer of electrolytic oxygen equipment for nuclear submarines.

252. TREADWELL CORPORATION — 41, 45, 47, 48, 119
1700 Broadway
New York, NY 10019
John M. Schreiner (212) 262-3120

Integrated engineering-construction firm with expertise in the ferrous and non-ferrous metals industries. Also has unique qualifications in electrochemistry and is the only producer of electrolytic oxygen equipment for nuclear submarines.

253. UNIFIED INDUSTRIES, INC. — 25, 48, 99, 107, 108, 112, 118
205 S. Whiting St. ——Suite 201
Alexandria, VA 22304
Walter L. Ambrose, Procurement Mgr.
(703) 751-2200, Ext. 69 or 79

A minority-owned, small business corporation furnishing competent and reliable systems engineering and technical support services to government and industry. Structured with no proprietary interest in hardware, providing an environment for objectivity through an unbiased approach. Application of specialized disciplines in the electrical, electronic and mechanical fields provides for support services in a wide range of technologies.

254. UTILITY RESEARCH CO. — 3, 17, 24, 94
98 Greenwood Avenue
P.O. Box 107
Montclair, NJ 07042
Harry S. Katz (201) 744-8259

Consulting and R&D on plastic materials, advanced composites, adhesives, elastomers; formulation, prototype and shortrun molding and production liaison.

255. VAN ALLYN, INC. — 45, 72A, 122
310 East 44th Street
New York, NY 10017
Wayne P. LeVan, Pres. (212) 986-0550

Franchisor of inventions, U.S. and foreign, involving the use of vehicular traffic to generate electricity without the use of energy fuel using only the weight of vehicles.

256. VENCON MANAGEMENT, INC. — 14, 23, 37, 53, 60, 64, 78, 92, 94, 117
730 Fifth Avenue——Room 918
New York, NY 10019
Irvin Barash, Pres. (212) 581-8787

Evaluates entrepreneurs, technology, markets, businesses, and arranges for equity and debt capital. Analyzes plant site locations and identifies and studies acquisition candidates.

257. VERSAR, INC.
6621 Electronic Drive
P.O. Box 1549
Springfield, VA 22151
Dr. Michael Markels, Jr., Pres.
(703) 354-3350

9, 13, 15, 17, 19, 23, 24, 25, 26, 30, 36, 37, 42, 47, 48, 55, 59, 66, 70, 74, 79, 80, 82, 84, 89, 90, 93, 95, 106, 110, 112, 113, 119

High technology firm dealing in studies relating to environmental quality, resource recovery, energy research, materials research, applied physics, and life sciences.

258. VERTREX CORPORATION
808 - 106th Ave., N.E.
Bellevue, WA 98004
Albert H. Rooks, Pres. (206) 455-4718

27, 28, 44, 45

Manufactures an electronic control device whose purpose is to reduce energy and cost consumption in building HVAC systems.

259. VETERINARY RESOURCES AMERICAS
12930 North A1A
Vero Beach, FL 32960
Dr. M. L. Simmons, Pres.

8, 12, 13, 27, 32, 36, 45, 47, 48, 49, 51, 81, 84, 89, 94, 103, 119, 123

Consulting firm specializing in biomedical aspects of energy conservation and experimental animal facility design and program management. Veterinarians, designers, and engineers working together.

260. VIRGINIA ENERGY OFFICE
823 E. Main St.——Room 300
Richmond, VA 23219
Louis R. Lawson, Jr., Director
(804) 786-8451

19, 45, 56, 103

Created by Governor Mills E. Godwin, Jr. in 1974 to serve as a focal point for energy related information, programs and planning for the State. RESPONSIBLE FOR: Keeping the Secretary of Commerce and Resources informed on energy developments and measures to minimize energy shortages in Virginia; Coordinating the flow of information between the various agencies of State government and working with the Federal and local governments and the private sector in implementing energy associated projects; Coordinating the development of energy plans and their strategies for implementation; Conducting action-oriented studies of alternative energy projects and programs; Developing and coordinating energy conservation programs for industry, commerce and private citizens; Cooperating with specific requests for the development of energy information, studies, projects, programs, or surveys; Maintaining continuous liaison with energy suppliers and distributors, agencies of other States and Federal agencies concerned with energy matters; Working closely with volunteer groups; and, Providing energy information to the public through the Virginia Energy Information and Conservation Center.

261. WVS ENGINEERS
12248 Spring Trail
Lakeview Terrace, CA 91342
William V. Susel, Pres. (213) 344-9936

19, 28, 34, 40, 45, 47, 56, 58, 70, 88, 92, 95, 103, 108, 114

Engineering management.

262. WESTERN SCIENTIFIC SERVICES
328 Airpark Drive
P.O. Box 1965
Ft. Collins, CO 80522
James F. Hedrick, VP (303) 482-3364

70, 83, 108, 123

Weather science, remote sensing, meteorological and environmental data monitoring system interfaced to satellite.

263. WESTWOOD RESEARCH LABORATORY
543 High Street
Westwood, MA 02090
John Cornell (617) 326-3965

9, 12, 23, 24, 33, 78, 81, 94, 110, 113

Independent dental research lab servicing clients in oral hygiene, chemical, drug and food industry. Specializes in developing models for dental disease, devise testing conditions which parallel those occurring in the mouth. Sets up screening programs which increase the chances for successful clinical investigation. Dental materials research, development and testing including specification testing. Specializing in polymeric materials.

264. WHEELER INDUSTRIES, INC.
1129 - 20th St., N.W.——Suite 403
Washington, DC 20036
E. Joseph Wheeler, Jr., Pres.
(202) 659-1867.

2, 12, 13, 22, 23, 25, 27, 63, 77, 87, 89, 91, 95, 103, 108, 109, 110, 112, 119

Involved in advance research and development planning in support of naval ship systems, underwater systems, and energy and environmental protection systems. Specializes in oceanographic and environmental research, as well as systems engineering for ship, air, electronic, mariculture and deep ocean systems.

265. WILFORD AIRCRAFT CORP.
300 Linden Lane
Merion Station, PA 19066
E. Burke Wilford (215) 664-1220

5, 6, 77

Aero architecture. Marine engineering.

267. GLEN W. WILTROUT (Consultant)
2028 N. Vermont Street
Arlington, VA 22207
(703) 528-9166

14, 27, 39, 60, 69

Government contract administration. Administrative management. Energy conservation education. Represents technical innovators (mechanical).

268. WIND-DE-GO, INC.
1940 W. Cheryl
Phoenix, AZ 85021
E. K. Hillman, Pres. (602) 943-0439

28, 44, 45, 72A, 78, 81, 103, 123

Performs first stage R&D on inventions for cost analysis. Develop control systems for hybrid solar/wind configurations. Co-develop product research on pain relief. Formulate marketing policy. Inventor.

269. WIND ENERGY RESOURCE DEVELOPMENT
P. O. Box 324
Bennett, CO 80102
Leslie J. Mathis, Pres. (303) 644-3710

4, 5, 16, 29, 30, 42, 44, 69, 78, 90, 94, 101, 103, 108, 117, 123

Engages in the design of wind energy systems and subsystems.

270. WOLCHUK AND MAYRBAURL
432 Park Avenue South
New York, NY 10016
Roman Wolchuk (212) 689-0220

47, 107

CONSULTANTS. Civil Engineering. Steel plate structures. Service platforms. Hoists. Stationary offshore oil drilling platforms. Transmission towers. Transformer foundations. Underground transformer vaults.

271. DONALD WORTH
336 Beacon St., Apt. 5
Boston, MA 02176

60

Employed by Massachusetts Department of Commerce & Development. Presently working for a State Task Force on economic development in Massachusetts of high technology companies.

272. DR. STANLEY W. ZEHR
1760 Lomitas Avenue
Livermore, CA 94550
(415) 443-2541

79, 103, 108

Materials Science——interested particularly in high efficiency solar cell development and device fabrication as well as overall systems design and analysis.