

Advertising & Public Relations Dir: Diane G Yancey  
Professional staff 31: chemistry; mechanical engineering; designing; drafting; 14 technicians and auxiliaries  
Field of R&D: Product and process development on reconstituted tobacco products for the tobacco industry, based on analytically oriented research programs; mechanical engineering applied in product research and development for a complete range of tobacco handling, making and packaging equipment

.9 -Industrial Products Group  
6301 Midlothian Turnpike, Richmond, VA 23225  
(804) 276-1900  
V Pres & Group Exec: Douglas P Crane

.10 --Bakery Systems Division, Apparel Equipment Division (p)  
and  
Union Machinery Division  
2115 W Laburnum Ave, Richmond, VA 23227  
(703) 355-7961 Telex: 82-7410 and 82-6316  
Cable: AMMAFOCO RCH  
Professional staff 20: 14 technicians and auxiliaries  
Field of R&D: Bakery research including continuous and batch dough processing, mixing processes, AMFlow and liquid sponge systems, divider rounder and proofer systems and processes, and baking, packaging and slicing processes; research in automated apparel equipment, photo-optical sensing, fusing applications, seaming and pressing, belt loop sewing and small part profile stitching

.11 -Potter & Brumfield Division (p)  
1200 E Broadway, Princeton, IN 47670  
(812) 385-5251 TWX: 810-350-2343 Telex: 27-8451  
Pres & Gen Manager: Joseph E Mulheim  
V Pres of Engineering: Zeke R Smith  
Dir of R&D: Walter J Richert  
Dir of Personnel & Industrial Relations: James H Price  
Safety Officer: James Romerhausen  
Professional staff 28: electrical, mechanical and electronics engineering; physics; chemistry; 96 technicians and auxiliaries  
Field of R&D: Applied research, design, development, tooling, testing, evaluation and analysis of solid state switching devices, dry reed relays, precision snap and slide switches, thermal and electromagnetic precision circuit breakers, custom hybrid assemblies, and a broad line of general purpose electromagnetic relays; switching of electrical circuits with solid state or mechanical devices which result in saleable products

.12 -AMF Voit, Inc  
3801 South Harbor Blvd, Santa Ana, CA 92704  
(714) 546-4220  
Pres: Marvin Rimland

.13 --Research and Development Department (p)  
3801 South Harbor Blvd, Santa Ana, CA 92704  
(714) 546-4220 Telex: 678-463  
V Pres of R&D: Robert Bruce Henderson  
Public Relations Officer: Richard G Smith  
Professional staff 13: engineering; design drafting; administration; 7 technicians  
Field of R&D: Research in plastics and rubber technology for use in recreational products, manufacturing processes for shaping metals and plastics, rubber technology for commercial products, and underwater technology

AP PARTS COMPANY  
See Questor Corporation

A9 APM HEXSEAL CORPORATION (pc)  
44 Honeck St  
Englewood, NJ 07631  
(201) 569-5700 Telex: 13-3403  
President and Director of Engineering: Milton Morse  
Chief Engineer: Edward Dimitry  
Professional staff 2: electrical and mechanical engineering; 2 technicians  
Field of R&D: Development of static and dynamic environmental seals for electronic devices; research in contact phenomena, insulators, metal flow, and corrosion; design and development of switch and shaft seals, armored power connectors, self-sealing fasteners, screws, bolts, rivets, and colored filters for miniature and sub-miniature clear lamps

A10 A R A CORPORATION  
2844 Cascadia Ave  
Seattle, WA 98144  
(206) 723-4600  
Pres: James A Curry

.1 -Analysis Research Associates (pfc)  
2844 Cascadia Ave, Seattle, WA 98144  
(206) 723-4600

Dir: James A Curry  
Professional staff 3 (1 doctorate): mechanical engineering; computer graphics; biochemistry; 1 technician  
Field of R&D: Product- or market-oriented research on metabolic aids, specialty foods, beverages, dairy and seafood products; the application of computer generated designs to tiles, wallpaper, rugs, draperies, textile fabrics, packaging films, thermoformable sheet, and decorative art; new specialty products of chemical or biological origin

A11 A R C LABORATORIES (fct)  
9236 N Tenth Ave  
Phoenix, AZ 85021  
(602) 943-3573

Dir: John T Long, Jr  
Professional staff 3: hydrometallurgy; inorganic chemistry; organic chemistry; 1 technician.  
Field of R&D: Research in hydrometallurgy of ores and concentrates, process development and improvement both chemical and mechanical

A12 A R F PRODUCTS, INC  
Gardner Rd  
Raton, NM 87740  
(505) 445-3665

Chmn & Pres: Arthur Maciszewski  
V Pres of Development: Andrzej Przedpelski  
Personnel Manager: Larry Burda

.1 -Research and Development Laboratory (fct)  
2559 75th St, Boulder, CO 80302  
(303) 443-4844

Dir of Research: Larry G Stolarezyk  
Professional staff 13 (1 doctorate): electrical and mechanical engineering; mathematics; 21 technicians and auxiliaries  
Field of R&D: Missile-borne transponders; receiver-transmitter technology; signal generation; instrumentation for the environmental sciences

A13 ARS/SPRAGUE-DAWLEY (pfct)  
(Division of The Mogul Corporation)  
P O Box 4220  
Madison, WI 53711  
(608) 221-2211 Telex: 26-5487

Pres: J H Deming  
Gen Manager, Head of Lab & Recruiting Contact: R D Fortney  
Group V Pres of Sales: F B Young  
Professional staff 3 doctorates: veterinary medicine; microbiology; 80 technicians and auxiliaries  
Field of R&D: Product-oriented research in animal genetics, gnotobiotics and microbiological diagnostics

A14 ASG INDUSTRIES, INC  
P O Box 929  
Kingsport, TN 37662  
(615) 245-0211 Telex: 55-3411

Chmn: Nelson M Loud  
Pres & Chief Exec Officer: F M Herman  
Dir of R&D: A H Agett

.1 -Corporate Laboratory (p)  
P O Box 929, Kingsport, TN 37662  
(615) 245-0211

Manager of Lab: T C Carson  
Manager of Personnel Admin: E R Marr, Jr  
Professional staff 9: glass ceramics; mechanical engineering; analysis; 15 technicians  
Field of R&D: Applied research in the flat glass field and related raw materials and finished products

A15 AST/SERVO SYSTEMS, INC (pct)  
930 Broadway  
Newark, NJ 07104  
(201) 484-4233 Telex: 13-9164

Pres: Julian F Reichman  
V Pres: Walter B Reichman  
Professional staff: 17 technicians and auxiliaries  
Field of R&D: Design, development, and testing of servo systems, servomechanisms, and related instrumentation

A16 A-T-O INC  
4420 Sherwin Rd  
Willoughby, OH 44094  
(216) 946-9000 Telex: 98-5420

(p) research for parent company (f) contract research for others (c) consultation for others (t) testing and analysis for others