

- .1 -Aerospace Division (p)  
3151 W Fifth St, Oxnard, CA 93030  
(805) 486-6461 Telex: 65-9419  
Gen Manager: Donald S Malmberg  
Technical V Pres: Edwin L Shaw  
Professional staff 10: mechanical engineering; 26 technicians and auxiliaries  
Field of R&D: Development of hydraulic pumps, motors, electro-hydraulic servo valves and servo actuators; applied research in related areas and basic research in electromotive forces and hydraulic phenomena
- .2 -Denison Division  
1160 Dublin Rd, Columbus, OH 43216  
(614) 488-1191  
Pres: Bruce R Horne  
V Pres of Engineering & Research: Edwin L Shaw
- .3 --Denison Research Center (fc)  
1220 Dublin Rd, Columbus, OH 43216  
(Mail: P O Box 1230, Columbus, OH 43216)  
(614) 486-9621 Telex: 24-5473  
V Pres of Engineering & Research: Edwin L Shaw  
Professional staff 25: mechanical engineering; electrical engineering; 41 technicians and auxiliaries  
Field of R&D: Applied Research and development in high pressure oil hydraulic components and electrohydraulic control systems
- .4 -Railroad Products Group  
Ramapo Valley Rd, Mahwah, NJ 07430  
(201) 529-3450  
Pres: Raymond A Frick  
Dir of Engineering: Arthur W Farrell
- .5 --Friction Materials Research Center (pf)  
Ramapo Valley Rd, Mahwah, NJ 07430  
(201) 529-3450  
Dir of R&D: G R Graham  
Professional staff 9: chemical engineering; chemistry; mechanical engineering; 25 technicians and auxiliaries  
Field of R&D: Basic research on polymers; applied research on friction materials
- .6 --Engineering Test Center (p)  
Ramapo Valley Rd, Mahwah, NJ 07430  
(201) 529-3450  
Manager of Engineering Tests: Donald E Steis  
Personnel Coordinator: Paul H Henning  
Professional staff 5: mechanical engineering; electrical engineering; 15 technicians  
Field of R&D: Dynamometer tests on automotive friction material, railroad car wheels, railroad brake shoes and caliber pads; vehicle tests on automobiles and highway trucks
- .7 --Cleveland Laboratory (p)  
5372 W 130th St, Cleveland, OH 44142  
(216) 267-2550  
Manager of R&D: R L Shaw  
Personnel Manager: J W Thomas  
Professional staff 4: metallurgical engineering; mechanical engineering; 9 technicians and auxiliaries  
Field of R&D: Research on friction materials for aircraft landing wheel brakes; brake dynamometer testing
- A21 ABRAMS AERIAL SURVEY CORPORATION (pfc)  
124 N Larch St  
Lansing, MI 48933  
(Mail: P O Box 508, Lansing, MI 48902)  
(517) 372-8100  
Chmn: Talbert Abrams  
Pres: Ralph E Kauffman  
V Pres of Operations: Silvano Tombelli  
Professional staff 4: photogrammetry; 30 technicians  
Field of R&D: Aerial and terrestrial photogrammetry
- A22 ACADEMY FOR EDUCATIONAL DEVELOPMENT, INC (f)  
680 Fifth Ave  
New York, NY 10019  
(212) 265-3350 Cable: ACADED  
Pres: Alvin C Eurich  
V Pres & Dir of Studies: Rexford Moon, Jr  
Professional staff 20, plus part-time consultants  
Field of R&D: Studies in instructional and communications technology, these studies often involve identifying crucial issues on which research is required, evaluating the usefulness and cost effectiveness of available hardware and software systems, and outlining the best ways of adapting new knowledge systems to the special problems of countries caught up in rapid social and economic change
- A23 ACCELERATORS, INC (p)  
212 Industrial Blvd  
Austin, TX 78745  
(Mail: P O Box 3293, Austin, TX 78704)  
(512) 444-3639  
Chmn: Alex Shesheennoff  
Pres: Bernard A Peskin  
Dir of Engineering: Francis D Orr  
Professional staff 20 (1 doctorate): nuclear physics; engineering; physics; 30 technicians and auxiliaries  
Field of R&D: Neutron radiography; ion implantation; activation analysis
- A24 ACCO (AMERICAN CHAIN & CABLE COMPANY, INC)  
929 Connecticut Ave  
Bridgeport, CT 06602  
(203) 335-2511 Telex: 096-4224  
Chmn of the Board & Chief Exec Officer: Wilmot F Wheeler, Jr  
Publications Services Manager: Robert B Morgan
- .1 -Allison-Campbell Division (p)  
875 Bridgeport Ave, Shelton, CT 06484  
(203) 929-5301 TWX: 710-450-3540  
Gen Manager: T E Douglass  
Manager R&D: D A Farmer  
Field of R&D: Applied and product-oriented research on abrasive cut-off wheels and techniques
- .2 -Bristol Division (p)  
40 Bristol St, Waterbury, CT 06720  
(203) 756-4451 Telex: 96-2417  
Gen Manager: Lawrence B. Krumm  
Manager of Group Advanced Development: Nazzareno Cedrone  
Field of R&D: Applied and product-oriented research on instrumentation systems, particularly for process control, including measurement and recording of pressure, flows, pH, temperature, amperage, voltage, relative humidity, and other variables
- .3 -Cable Controls Division (p)  
1022 E Michigan St, Adrian, MI 49221  
(313) 263-5761 Telex: 223-429  
Gen Manager: G Boyd Vass  
Manager R&D: William J Gilmore  
Field of R&D: Applied research on design and manufacture of cable control assemblies for automotive, aircraft, marine, and specialized applications
- .4 -Chain Conveyor Division (p)  
Engineering & Development Center  
12755 E Nine Mile Rd, Warren, MI 48089  
(313) 755-7500 Telex: 23-5362 Cable: ACCOCHCON WARN  
Gen Manager: W Benjamin Pipp  
Product Engineering Manager: Alfred N Tononi  
Field of R&D: Research and development relating to equipment for mass manufacturing industry, principally conveyors and automation devices
- .5 -Page Welding Division (p)  
205 Clay St, Bowling Green, KY 42101  
(502) 781-5560 Telex: 554-355  
Gen Manager: Richard S Stonage  
Manager of Engineering & Product Development: Lester J O'Brien  
Field of R&D: Applied research on development of welding wire analysis and welding techniques
- A25 ACE GLASS INCORPORATED (pc)  
1430 Northwest Blvd  
Vineland, NJ 08360  
(609) 692-3333  
Pres: Olive R Kramme  
V Pres & Gen Manager: Paul E Kramme, Jr  
Dir of R&D: Charles M DeWoody  
Professional staff 3: chemical and electronic engineering; 2 technicians  
Field of R&D: Applied research in glass and apparatus design
- A26 ACETO CHEMICAL CO INC (p)  
126-02 Northern Blvd  
Flushing, NY 11368  
(212) 898-2300 Telex: 6-2662 Cable: ACETOCHEM  
Chmn of the Board: Arnold J Frankel  
Pres: Seymour Mann  
V Pres & Dir of Research: Julian Reasenberg  
Gen Manager of Development: James Dillon  
Gen Manager of Manufacturing: Robert China  
Other Lab Locations: Carlstadt, NJ and Long Island City, NY  
Professional staff 9: chemistry; chemical engineering; 4 technicians  
Field of R&D: Research on the synthesis of organic intermediates for the pharmaceutical, dyestuffs and textile industries; formulation of chemical specialties for the rubber and paint industries

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