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#### **SUMMARY**

Human Factors Specialist Certified Professional Ergonomist Licensed Psychologist

Past-president of the Human Factors and Ergonomics Society (HFES); Fellow Former Executive Council officer of Human Factors and Ergonomics Society (25 years) Past-Chair, Forensics Professional Group of HFES

Affiliate of Applied Experimental and Engineering Psychologists, American Psychological Association

Former Editorial Board member of the journal, <u>Human Factors</u> (for 17 years)
Served on select human factors study team for the Nuclear Regulatory Commission
Director of IPW, Inc., an aviation passenger safety organization (inactive)
Taught university courses in human factors and industrial psychology
Managed human factors organizations at Bostrom Corp., North American Aviation
(Rockwell International), Litton Industries, and Hughes Aircraft Company
Forensic consulting in product liability, personal injury, and vehicular accident cases
Member, American College of Forensic Examiners (ACFE)
Diplomate of American Board of Psychological Sciences, ACFE

## **EDUCATION**

Ph.D. -- Experimental Psychology, Purdue University, 1960

M.S. -- Experimental Psychology, Purdue University, 1958

B.S. -- Psychology, Marguette University, 1956

# **EMPLOYMENT EXPERIENCE**

- 1960 1962, Bostrom Corp. (Milwaukee). Research Psychologist. Directed studies on the effect of vibration on human performance including reaction time, vision, steering ability, decision-making, fatigue. Analysis of biodynamics and seating design.
- 1962 1965, North American Aviation, Space Div. Senior Research Engineer on the Apollo Space Program. Conduct of studies on NASA astronauts for the design of controls, displays, body support, restraint system, space suits, life support systems, procedures, warnings, instructions, and general spacecraft interior design.
- 1965 1967, North American Aviation, Los Angeles Div. <u>Behavioral Sciences Group Head</u> for studies of advanced aircraft cockpit design relative to the controls, displays, seating, emergency procedures, escape, and crew integration in low-altitude flight.

- **1967 1968, North American Aviation, Autonetics Div.** <u>Group Scientist</u> for research on cockpit displays, pilot performance and visual characteristics.
- 1968 1972, Litton Industries, Advanced Marine Technology Div. \_ Human Factors Project Manager and Quality Assurance Representative for two Navy ship design programs -- the LHA and the DD-963 class destroyer. Applications concerned crew facilities, illumination, noise, weapon handling, information system controls and displays, equipment handling during ship motion, maintenance, personnel safety, and operational manuals.
- 1972 1985, Hughes Aircraft Co., Ground Systems Group. <u>Head of the Human Factors Staff.</u> Design support of complex systems including command and control, air defense, radar, sonar, air traffic control, and other electronic systems. Applications were control-display consoles, workstations, and large facility control centers, and included analysis of user characteristics, skill level, training, personnel hazards, duty cycles, visual processes, display optimization and performance during stress.
- 1985 1988, Hughes Aircraft Co., Ground Systems Group. <u>Human</u>
  <u>Engineering Head</u> for special studies on the FAA's Automation System for advanced air traffic control. Primary activity involved the research and application of new display technology for tower control facilities, including legibility of display formats and use of color coding to enhance performance and to reduce human error and enhance safety.
- 1988 1989, Hughes Aircraft Co., Ground Systems Group. Senior Staff, System Engineering Operations. Responsible for workstation and facility design, and user-system operational interfaces for a variety of surveillance and communication systems. Research studies for a Canadian air traffic control system, California transportation control operations, and advanced technology devices for automobiles.

### **CONSULTING**

Southern California Edison Company. <u>Human Factors Consultant.</u>
Performed a human factors evaluation of the Critical Functions Monitoring System (CFMS) at the San Onofre Nuclear Generating Station Units 2 and 3. Prepared technical report with design recommendations to satisfy NRC requirements. Performed human factors evaluation of proposed upgrading of CFMS for Unit 1 and participated in CRDR (control room design review) for its planned upgrade. Warning and safety systems.

TROPITONE Furniture Co., Inc. <u>Human Factors Consultant.</u>

Provide human factors evaluations relative to furniture design, safety, warnings, and consumer use in support of its President, corporate attorney, and design engineering.

### TEACHING EXPERIENCE

1957 - 1960, Purdue Univ. Graduate Teaching Assistant; taught basic Psychology.

1972 - 1974, Cal State - Los Angeles. Taught graduate-level courses in human performance and user-system interactions.

1975 - 1981, Cal State - Fullerton. Taught graduate course in Industrial Psychology.

## **FORENSICS**

Analysis, deposition and testimony in cases:

Caterpillar Towmotor forklift design, including warning signs, overhead protection, load handling, and operator actions.

General Motors, Chevrolet Monte Carlo design of gear-shift console, transmission position indication, driver experience, and human reaction behavior.

McDonnell-Douglas F-4 (Phantom) aircraft cockpit instrument panel design, control placement, switch guarding and labeling, and pilot behavior.

Wabco water-pull construction vehicle design related to steering, braking, rollover protection, training, and operator action in an emergency.

Porsche-Audi sports car compartment design relative to seating, brake pedal design, driver experience, female anthropometry, and leg muscle strength.

Beechcraft airplane cockpit design relative to pilot anthropometrics, arm muscle strength, use of controls, switch placement and guarding, indicators, reaction time, and pilot actions in emergency conditions.

Williams White punch press design and operation relative to safeguarding and warnings in normal and maintenance activities, operator experience and behavior.

Ole's Home Center & Clear-All Chemical relative to human behavior in opening caustic chemical container, hand forces, warnings, labeling, and user experience.

Roper Industries sheet steel roller machine relative to foot pedal control, guarding, worker behavior, and workstation layout.

Lance Industries/Radio Shack regarding warnings for antenna erection, labeling, safety hazards, and consumer product safety regulations.

Maytag washing machine design dealing with safety interlocks, warnings, instructions.

Tuna fishing boat regarding lifting limits, load handling, and anthropometrics.

Van Dorn Iron Works regarding guarding, instructions, labeling, training, and use of switches.

Tuna fishing boat (Granada) regarding maintenance design and behavior, use of safety devices, warnings, training and experience.

Square D and Clearing Machine punch press, regarding use of foot-pedal, material handling, guarding, and operator procedures.

Sitmar Cruise lines regarding stateroom layout, passenger behavior, bunk/ladder design.

Trip and fall accident in parking lot relative to visibility, work habits, warning signs, lighting.

Honda Kawasaki ATV design relative to carrying, roll-over dynamics.

Paslode compressed air nailer regarding warnings, instructions, and tool design.

Sikorsky S76A helicopter crash relative to cockpit design of controls, displays, alarms, warnings, pilot performance during emergency, stress, and training.

Escalator accident relative to warning signs, emergency stop control, hand-holds, location of assist personnel.

Tar kettle accident relative to warning labels, operating instructions, maintenance manual, and design of controls and displays.

Dump truck fatality accident relative to warnings, labels, instructions and training.

Franzia champagne bottle accident relative to warnings, labels, experience and training.

Bungee cord accident relative to warnings, use, experience.

Truck-car accident relative to driving behavior, reaction time, perception, control responses.

TRAK forklift rollover injury relative to controls, inadvertent activation, displays, display location, warnings, and operators manual.

Ferrellgas LPG tank explosion injury during filling relative to use of valves and hose, work habits, safety instructions, warnings, and operators manual.

Railroad tank car asphyxiation as influenced by Mine Safety Appliances gas test meter design, procedures, controls, visual and audible alarms, labeling, warnings, visibility, and operators manual.

Slip and fall accident regarding accessibility, reasonableness of behavior, motivation.

Power-gate injury relative to accessibility, guarding, warnings, motivation, and reasonableness of behavior.

Ingersoll-Rand air compressor injury relative to warnings, displays, operators manual, and reasonableness of behavior.

Fire-extinguisher accident relative to warnings, instruction manual, behavior of safety personnel.

Child restraint seat relative to packaging, advertising, instruction manual, installation, warnings, protection provided, conformance with Federal Standards, parental behavior.

Baskin-Robbins ice cream tub cutter relative to design, operations, instructions, warnings.

John-Deere bulldozer regarding workstation layout, controls, guarding, warnings.

Car-bicycle accident regarding visibility factors and driver behavior.

Tanning salon skin damage regarding warnings, instructions, individual behavior.

AMTRAK railroad fatality regarding warnings, habits, risk assessment, crossing protection.

CalTrans highway striper regarding warnings, instruction manual, hardware design, procedures.

Phostoxin pesticide explosion regarding warnings, handling procedures, training.

CIBA-GEIGY epoxy resin explosion regarding warnings, labels, procedures.

Fall from ladder considering ladder features, climbing, and load carrying behavior.

Chevron oil rig fatality regarding hardware design, power controls, labeling, warnings, experience, team behavior.

Getman Engineering concrete scooter-buggy regarding workstation design, driving controls, steering, and visibility factors.

Chemetron halon 1301 tank injury accident regarding labeling, warnings, actuation lever design, instruction manual, training/experience/expectancies.

Trip and fall on steps at Black Angus restaurant regarding defect visibility, and stepping actions.

Mid-Lands Chemical Co. Polar Pack regarding label interpretation, warnings, and user expectancies and experience.

Trip and fall on steps at Taco Bell restaurant regarding steps, exit door, visibility, and arrangement of facilities.

Fisher-Price child restraint seat failure regarding seat belt routing, instructions, warnings and labels.

Walk/fall through plate glass window injury at residence regarding visibility, glare, reflection, internal and external lighting, and expectancy issues.

Agricultural forage box machinery injury accident regarding guarding, instructions, warning labels, visual and auditory cues.

Truck/pedestrian accident regarding visibility, reaction time, signal light functions, crosswalk and intersection characteristics, youthful behavior, and children control.

Auto ramp fatality regarding design, warnings, expectancies, and consumer use.

Cumulative trauma disorder of AMTRAK engineer regarding control operations for train locomotive, posture, motion repetition, muscle forces and shift duration.

Police shooting of unarmed suspect, considering perception and reaction times within unique lighting and environmental aspects (criminal case).

Back injury from oil rig fall regarding belt use and warnings.

Car-pedestrian accident at VA Hospital considering visibility of cross-walk, markings, driver behavior and design of roadway characteristics.

Ski-lift injury regarding layout, access, warnings, management practices, and facility protection.

Car-pedestrian fatality regarding visibility, reaction time, and intersection design.

Laundry accident regarding caustic materials, maintenance, warnings, and machinery design.

Industrial sweeper and chemical accident regarding warnings, labels, and operational procedures.

Radio Shack multimeter in electrocution regarding warnings, meter design, and reasonableness of behavior.

Catering truck fire regarding fire extinguisher, warnings, behavior, safety practices.

Industrial sander machine accident regarding operation, guarding, warnings, training, experience, maintenance procedures.

Industrial machine -- granulator -- fatality regarding operations, guarding, electrical lockout, warnings, training, experience, maintenance procedures.

United Airlines B-727 overhead storage bin design regarding passenger injuries, use, access, in-flight announcements, post-flight announcements, warnings.

Caterpillar bulldozer regarding rapid fire, emergency egress, and operator behavior.

Chemical burn accident regarding experience, labeling, warnings, user behavior.

Trip/fall accident in commercial parking lot regarding visibility, warnings, layout.

Mobile scaffolding accident regarding vital controls, switches, foot pedal, guarding, warnings, labeling, use of controls for multiple actions, inadvertent activation.

Yazoo tractored mower regarding accidental movement engagement, use of parking brake, mowing operations, workstation design, guarding, labels, safety switch, bypassing.

Manual lifting and loading back injuries for a woman based on NIOSH lifting equations.

Machine design and employer policies relative to meat processing machine regarding operations, guarding, interlocks, warnings in hand amputation accident.

Analysis of labels and warnings for juice drinks relative to allergic reactions.

Analysis of warnings and keypad for gate operation in fatality accident with young person.

Evaluation of Sea-Doo personal watercraft design and control characteristics in fatality accident.

Warning issues relative to Chrysler Minivan service actions regarding passenger ejections through rear door area during accidents with latch failures.

Auto collision fatality regarding visibility factors and perception/reaction time at night.

Trip/fall in furniture store regarding visibility, expectancies, warning factors.

Trip/fall in parking lot regarding curb, tire-stop placement, visibility, expectancies.

Auto collision with firetruck regarding visibility, expectancies, reaction time at night.

Analysis for defense of design for material feeder into shaping press relative to guarding, maintenance, operating procedures, warnings, training, safety practices.

Tractor run-over regarding original design, modifications, accessibility to starter for bypass starting, instructions, warnings.

Analysis of warning label and operations of pumpiack scaffolding in construction.

Boeing 757 aircraft runovers of ground personnel regarding pushback operations, communications, use of communication panel on nosegear, visibility, reaction time.

Analysis of driver visibility, parking structure, and child behavior in vehicle-tricycle collision.

Evaluation of driver behavior, experience and warnings in vehicle roll-over fatality.

Trip/fall of woman in Circuit City parking lot; vision, reaction time, expectancies, dolly-handling performance.

Knott's Berry Farm park accident relative to crowd control and safety measures.

Analysis for defense of conveyor design installation in workplace injury relative to lighting, visibility, expectancies, and fall from loading ramp.

Auto collision regarding roadway characteristics, influence of construction, signing, visibility, driver experience and expectancies in night-time fatality accident.

Victaulic pipe groover machine relative to machine guarding, warnings, operations.

Motorhome injuries relative to jack-leveling operations, operator manuals, warnings, instructions.

Analysis in car/truck freeway accident regarding visibility, reaction time.

Design deficiencies in hospital gurney regarding brake control pedal, labeling, instructions.

Electrocution of maintenance worker regarding warnings for high voltage, lockouttagout procedures, instructions, organizational safety responsibilities.

Report for trip/fall in restaurant parking lot regarding visibility, behavior, expectancies.

Analysis for trip/fall of elderly woman regarding visibility and expectancies for sidewalk planter area.

Analysis for trip/fall of elderly male in store regarding visibility, expectancy, placement of hazard.

Warnings, instructions, demonstrations regarding refueling and LPG controls in defense of recreational vehicle manufacturer and leasing agency actions relative to foreign-language speaking users.

Analysis for trip/fall on speed bump regarding visibility, lighting, expectancies, experience.

Vehicle/pedestrian fatality incident regarding visibility, expectancies, reaction time. (criminal case)

Site evaluation for trip/fall in pool area at night regarding lighting and visibility.

Defense of service agency in tortilla machine/oven injury regarding operations, maintenance, and guarding issues.

Freeway accident analysis regarding visibility, reaction time, lane closure warnings, lane obstruction.

Analysis of LPG tank explosion regarding warnings, labels, user expectancies.

Evaluation of recreational accident, youthful behavior, perceived risk on church grounds.

Analysis of fall accident in a silo at Adohr Farms regarding maintenance, expectancy, guarding, procedures.

Slip/fall on stairs in janitorial activities regarding water use, expectancy, warnings.

Machinery guarding, warnings, maintenance/repair procedures and visibility of moving parts in drive pulley and belt area.

Evaluation of fall into open pit area regarding maintenance of pipe roller machinery.

Construction site accident in operation of outriggers on truck for maintenance boom control design, displays, warnings, labeling, experience, training.

Car v bicycle accident regarding night-time visibility, perception, reaction time.

Trip/fall on public sidewalk regarding visibility, conspicuity of elevated slab, expectancies, walking behavior.

Car v pedestrian in crosswalk at night; visibility, lighting, expectancies, driver performance, perception/reaction time.

Exposed sliding door, impacting elderly woman; lack of guarding, expectancy, design and instalation issues in elderly care facility.

Evaluation of school door and supervision/instruction in child's finger amputation.

Analysis of hot liquid spill on customer regarding cup design and handling in car.

Ergonomic evaluation of pole climbing in railroad yards and impact on knee injuries.

Ergonomic evaluation of back injuries of railroad yard conductor in respect to biomechanical demands of setting railroad car manual brakes.

Inspection and analysis of high-reach lift controls and operation with fatality.

Inspection and analysis of power brush mower for safety of operation, need for an operator presence control regarding blade rotation, and warning factors.

Trip/fall in parking lot at medical facility on speed bump placed in proximity to entry regarding visibility, expectancies, normal behavior.

Analysis of Fokker commercial aircraft crash from loss of control during unintended thrust reverser deployment and lack of warnings and information for flight crew.

Helicopter and helipad operations relative to head injuries experienced by an approaching photographer; visibility; experience; excpectancies; flight operations.

Analysis of machine guarding, warnings, procedures in drill press operations.

Evaluation of warnings/labels of plastic sheeting for painting in fall from ladder.

Evaluation/analysis of chemical plant operator exposure to hydrogen sulfide regarding procedures, sensors, warnings, monitor alarm panel design, use of PPE.

Evaluation of Sheraton hotel parking lot lighting and design features in elderly person trip and fall matter.

Construction site injury regarding training, experience, communication of operational signals, organizational responsibilities in irrigation system installation.

Evaluation of parking structure design regarding hanging obstruction and lack of clearance for persons exiting a parked vehicle (head injury).

Freeway construction site accident (at night; sweeper truck striking foreman) with issues of lighting, visibility, safety meetings, training, Caltrans practices.

Parking lot accident of vehicle rollover of pedestrian's foot with issues of visibility, perception/reaction time, area layout, walking speed, driver perception.

Gasoline station fire caused by customer in filling containers; static electricity; customer habits, warning signage issues.

Evaluation of auto dealership conditions relative to mopping of surface, customer perception, warnings, slip and fall.

Evaluation of Albertson grocery store practices and standard of care in cleanup of fluid spills in aisleways, use of warnings in slip and fall.

Trip/fall of healthcare giver on extension cords in walkway re visibility, expectancy, responsiveness to homeowner instructions.

Truck/car accident at a "T" intersection regarding visibility, perception, reaction time, experience, location of visual obstruction.

Analysis of truck/pedestrian accident with elderly pedestrian in crosswalk, including consideration of crosswalk signals and elderly walking behavior.

Valet-driven car striking pedestrian at entry to Ritz-Carlton hotel regarding lighting, visibility, perception, reaction time, training, signage, markings, expectancies.

Criminal case of shooting during holdup of liquor store regarding intent, stress, finger strength, trigger force, experience/training issues.

Ford Explorer Sport injury related to exposed seat track; product design defect issues considering leg movement, exiting vehicle, elevation and extent of exposure; others.

Drexel furniture related eye injury at Ritz-Carlton hotel; design of Armoire relative to functionality, expectancies, experience, aesthetics.

Evaluation of commercial parking lot regarding vehicle/pedestrian walkways.

Vehicle/pedestrian fatality at T-intersection on Pacific Coast Hiway; roadway design, lighting, visibility, signal timing, crosswalk location issues.

Ford Econoline Van (15-passenger) rollover relative to driver fatigue issues.

Evaluation of commercial weed whacker regarding warnings and forest fire potential.

Evaluation of railroad pedestrian fatality regarding access, customary use, warnings, guarding, expectancies.

Construction site fatalities in confined space conditions with issues of warning devices, training, experience, guarding, and duty to warn.

Evaluation of behavior and warning issues in a fatality accident at a Hawaiian blowhole.

Yamaha/Philips Electronics integrated circuit machinery accident relative to warnings, guarding, interlocks, training and operational issues.

Evaluation for trip/fall in Walmart (Alaska) display area regarding design of supports, location of obstructions, visibility, expectancies.

Evaluation of circumstances for near-drowning in public swimming pool regarding design safety, markings, protective devices, warnings, visibility, adult monitoring behavior.

Trip/fall over drainage obstruction at business site regarding expectancies, signs, conspicuity.

Trip/fall at residential walkway regarding expectancies, warnings, conspicuity.

Analysis of car/pedestrian collision during early morning hours regarding visibility, experience, expectancies, roadway design.

Evaluation and declaration in injury case regarding operation, training, experience, handling issues pertinent to an electric-powered road cycle.

Train/pedestrian fatality (UPRR) involving premises protection, normalcy of use, desensitization, expectancies, visual effects, warnings.

Hospital fatality regarding design of Abbott Laboratories morphine injector pump regarding controls, displays, alarms, information presentation, access, programming procedures; as well as hospital care procedures.

Evaluation of fall on hotel stairwell regarding access, expectancies, crowd control.

Union Pacific Railroad yard amputation of legs of a brakeman relative to manual track switching, switch visual indicators, track orientation, job responsibilities, crew interactions, switching yard operations and communications.

Palm Casual Furniture design of patio chair resulting in injuries from inadvertent tipping involving chair design, adult user behavior, warning issues.

#### SPECIAL APPOINTMENT

In 1980-82, was appointed to serve on a select study team under contract to the Nuclear Regulatory Commission as a result of the Three Mile Island accident. Was one of seven scientists investigating human factors and safety of operations in nuclear power plant control rooms. Focus was on human engineering issues such as controls, displays, alarms, warnings, equipment accessibility, operational utility, selection/training, and other human factors. Participated in writing a 3-volume report on long-range human factors needs for the nuclear power industry. Met with the NRC Commissioners to discuss findings.

### REPRESENTATIVE PUBLICATIONS

Hancock, Hendrick, Hornick and Paradis. Human Factors Issues in Firearms Design and Training. <u>Ergonomics in Design</u>, 2006, vol. 14, No. 1.

Hornick and Vredenburgh. A Two-Way Street -- with Hazards; Expert/Attorney Communications. <u>Proceedings, Human Factors and Ergonomics Society</u>, 48th Annual Meeting, New Orleans, 2004.

Hornick, R. J. Issues for Human Factors Experts in Litigation. <u>Proceedings, Human Factors and Ergonomics Society</u>, 47th Annual Meeting, Denver, 2003.

Hendrick, Paradis and Hornick. Human Factors Aspects of Handgun Design.

<u>Proceedings, Human Factors and Ergonomics Society</u>, 47th Annual Meeting, Denver, 2003.

Noy, Vredenburgh, Hornick, Mortimer, Thompson, et al. "Mock Trial: Human Factors Contributions to Litigation Involving Adaptive Cruise Controls". <u>Proceedings, 14th Triennial Congress of the International Ergonomics Assoc.</u>, August, 2000.

Hornick, R. J. "Human Factors Study and Report for Critical Functions Monitoring System at San Onofre Nuclear Generating Station Units 2 and 3", prepared for <u>Southern California Edison Company</u>, Dec. 1990. (contract report).

Hornick, R. J. "Human Factors Considerations in Workstation Design". In: <u>Human Factors in Accidents and Litigation</u>. Peters & Peters, (eds.), Garland Press, 1988.

Hornick, R. J. "Dreams -- Design and Destiny". <u>Human Factors</u>, 1987, vol. 29, No. 1, 111-121.

Hopkins, Snyder, Price, Hornick, Mackie, Smillie and Sugarman. "Critical human factors issues in nuclear power regulation and a recommended comprehensive human factors long-range plan". Three volumes. NUREG/CR-2833, <a href="Nuclear Regulatory Commission">Nuclear Regulatory Commission</a>, 1982.

Hornick, R. J., Robinson, J. E. and Sullivan, D. "Design Engineers Concepts of Skills for System Operation and Maintenance". <u>Navy Personnel Research and Development Center</u>, Contract No. N00123-77C-0782, December, 1978.

Hornick, R. J. "Vibration". Chapter in <u>NASA Bioastronautics Data Book</u>, NASA Special Publication, 1973.

[Approximately 60 other publications in scientific journals, company reports, and contracts; numerous published book reviews.]

## REPRESENTATIVE PRESENTATIONS

Panel Chair for "A Two-Way Street -- with Hazards; Expert/Attorney Communications", Forensics Professional Group, HFES Annual Meeting, New Orleans, 2004.

Panel Chair for "Human Factors in Litigation", Forensics Professional Group, HFES Annual Meeting, Denver, 2003.

Panelist in seminar in "Murder or Accidental Shooting: Human Factors Considerations"; presentation titled "To Shoot or not to Shoot -- That is the Big Question". Human Factors and Ergonomics Society Annual Meeting, Minneapolis, 2001.

Invited speaker, "OSHA's Final Ergonomic Program Standard"; Arter & Hadden Employment Law Forum, Irvine, CA, 2001.

Commentator for Mock Trial concerning Adaptive Cruise Control in a vehicle accident; International Ergonomic Association Triennial Congress and Human Factors and

Ergonomics Society Annual Meeting, Forensics and Surface Transportation Professional Groups, San Diego, CA, 2000. (Videotape available from HFES, Santa Monica, CA)

Commentator in Mock Trial re: Pedestrian Encounter with a Tripping Hazard; Annual Meeting of Human Factors and Ergonomics Society, Forensics Professional Group, Albuquerque, NM, 1997. (Videotape available from HFES, Santa Monica, CA.)

Commentator in Mock Trial re: Adequacy of Warning Systems for Product Hazards; Annual Meeting of Human Factors and Ergonomics Society, Forensics Professional Group, Albuquerque, NM, 1997. (Videotape available from HFES, Santa Monica, CA.)

Invited speaker and panelist for applied ergonomics session at Western Environmental and Health Safety Conference of the National Safety Council, Anaheim, CA, 1997.

Keynote address, "Designs that Kill and Maim", for the Silicon Valley Ergonomics Conference, Palo Alto, CA, 1996.

Discussant for "Professional Conduct for Ergonomic Experts in Forensics", panel session at Human Factors and Ergonomics Society Annual Meeting, San Diego, 1995.

Invited speaker regarding "OSHA pending regulations in Ergonomics" for Personnel Law Update 1995, Council of Education in Management, Santa Barbara, CA, 1995.

Workshop Leader for Forensics Practice, Human Factors & Ergonomics Society, Nashville, 1994.

Invited speaker at Washington State Trial Lawyers Association Seminar, "Ergonomics and Tort Law", Seattle, 1993.

Organizer and Chair of Forensics Professional Group panel on professional practice at Human Factors and Ergonomics Society Annual Meeting, Seattle, 1993.

Organizer and Chair of Forensics Professional Group panel on professional practice at Human Factors and Ergonomics Society Annual Meeting, Atlanta, 1992.

Lecturer at University of Southern California, Institute of Safety and Systems Management, Los Angeles, 1992.

[Numerous presentations as invited speaker and panel participant at chapter meetings of the Human Factors and Ergonomics Society; University groups; Chambers of Commerce, and similar organizations.]

#### **HONORS**

Recipient of the "Arnold M. Small President's Distinguished Service Award", granted by the Human Factors & Ergonomics Society for "...career-long contributions which have brought honor to the profession and the Society". (October, 1994)

Recipient of Certificate of Appreciation for "Significant Contributions to the Profession as a Fellow of HFES and Member of HFES/LAC". (December, 1995)

Sigma Xi, National Scientific Honorary Society.