

## **ROBERT P. COTTON**

### ***SPECIALIZED PROFESSIONAL COMPETENCE***

Technical specialties are elevators and escalators, including failure analysis, troubleshooting, installation, repair, modernization, maintenance, inspection, code, and contract compliance.

- in the area of failure analysis, experience has focused on electrical and mechanical failures of elevator and escalator systems. These include all vintages of high-rise, high-speed multiple elevator groups, hydraulic elevators in smaller apartments and commercial buildings, freight elevators, ADA lifts, funiculars and multiple escalator systems in shopping malls, hospitals, transit systems and convention centers.
- in the area of troubleshooting, experience has focused on determining the nature and root cause of mechanical and electrical malfunctions and failures, and re-designing / reengineering the circuitry and / or mechanisms to be more dependable and longer lasting.
- in the area of installation, experience includes field surveys and installation of complete elevator & escalator systems from start to finish, from single units to multiple units, including final adjustments, testing, inspections, certifications, and acceptance.
- in the area of repair work, experience includes the removal and replacement of a wide variety worn and damaged equipment from elevators and escalators, including creative solutions for removing heavy, awkward components that could not otherwise be accessed. Experience also includes replacing all high-wear elevator and escalator chains, bearings, cables, motors, generators, gearboxes, and hydraulic valves, pump and cylinder assemblies, cab interiors and fixtures.
- In the area of modernization, experience includes designing, adapting, final adjusting, and testing new components for existing systems, including new motors and drive units, doors and operators, safety and code upgrades, handicap requirements, elevator interior remodels, and computer-based logic controllers for multiple-elevators, high-rise buildings, Escalator code compliance upgrades, design, implementation & acceptance.
- in the area of maintenance, experience includes preventive and periodic maintenance of all types of residential & commercial elevators, including high-speed and low-speed passenger and freight elevators, hydraulic and electric traction elevators, dumbwaiters, ADA lifts, funiculars, and escalators, according to OEM and Common Carrier requirements.

- in the area of project management & inspection, experience includes drafting of specifications and contracts, equipment assessments, field surveys for bidding purposes, site progress inspections for portions of specific construction and modernization contract compliance, as well as final acceptance testing for specific contract specifications and scopes of work, coordination with as well as delegation of authority from the State of California Elevator Division of Cal/ OSHA, including ASME National & State code compliance issues. Performed over 1000 separate inspections.

## ***EDUCATION, REGISTRATIONS, AND CERTIFICATIONS***

- Teaching credentials for National Elevator Industry Educational Program (NEIEP), 1992  
— Completed NEIEP Level 1 Teaching Seminar.
- Journeyman Elevator Mechanic, International Union of Elevator Constructors, Mechanic (I.U.E.C. Local #8), Union member for 20 years.  
— Completed 18 of the 22 NEIEP educational courses offered.
- Certified Competent Conveyance Mechanic, State of California, since 2003
- City of Los Angeles Certified Elevator Mechanic, since 2009
- Business Curriculum at Indian Valley College (Novato, California).

## ***PROFESSIONAL EXPERIENCE***

### **National Elevator Industry Educational Program – Technical Training Instructor (September 1992 to 1999)**

Courses instructed include:

- Mechanics Exam Preparation and Review Course
- Circuit Tracing and Troubleshooting
- Basic Electricity
- Construction Wiring
- Doors and Operators
- Escalators
- Hydraulics
- Elevator Hoist Cable Replacement

### **Bay Area Rapid Transit District**

**2/98 - 8/01:** Hired into the Engineering Department to draft specifications for new and renovated elevators and escalators; Quality control testing and inspections; Progress inspections, verifications, and acceptance for 300 renovated elevators and escalators; Provide technical support for in house technicians; Coordination with State agencies for code enforcement inspections and permits; Common Carrier compliance.

**8/01 – 8/18:** Promotion to Section Manager: In addition to the above, supervise system-wide elevator and escalator repair and modernization personnel; Lead inspector for testing and acceptance of new and renovated equipment system-wide; Coordination with State agencies for acceptance of all elevator & escalator equipment. Staff expert witness / PMK for Bart elevator / escalator litigation. Responsible for 180 escalators and 140 elevators. Engineering support for new stations, modernizations; Common Carrier compliance.

**7/95 – present: Expert Witness / Consultant**

Provide expert witness testimony to various law firms, insurance companies and building owners regarding a wide range of elevator & escalator related issues; designated an “expert” in this realm multiple times before live courtroom juries in San Francisco and Los Angeles. Deposed on at least 75 occasions as an expert. Expert status never disputed.

**Armor/KONE Elevator Company, San Francisco, CA (June 1989 to July 1995). Armor Elevator Company merged with Montgomery/KONE in the fall of 1994. Star Elevator Company, Redwood City, CA (July 1987 to June 1989). Atlas Elevator Company, San Francisco, CA (June 1984 to July 1987). Journeyman Elevator Mechanic (I.U.E.C. Local #8)**

Responsible for service, troubleshooting, repair, construction, and modernization of elevators and escalators, including duties as a foreman.

**Armor Elevator Company (January 1979 to September 1983). Elevator Mechanic’s Helper (Member I.U.E.C. Local #8)**

Assisted Journeyman in service, repair, modernization, and adjusting departments of major Elevator / Escalator Company.

**Armor Elevator Company (February 1978 to January 1979). Atlas Elevator Company (September 1976 to February 1978). Supervisor’s Assistant, Purchasing Agent, Parts Department, and Fleet Manager**

Responsible for ordering and cost-effective delivery of inventory for six repair crews and 12 service technicians. Personally performed major and minor service of 20-vehicle fleet.