



# Airfield Electrical

Arora's airfield electrical practice utilizes their experience and knowledge of current airfield products, standards, and installation practices to provide modern, coordinated, cost-conscious, and schedule sensitive design solutions for large, medium, and small airport operations. Throughout the life of the company, Arora has successfully designed airfield lighting systems for over a billion dollars of construction at airports across the United States. Our airfield designers are experienced in civilian and military airfield systems as well as engaged in industry leading organizations such as American Association of Airport Executives (AAAE), Airport Consultants Council (ACC), and Illuminating Engineering Society of North America Aviation Lighting Committee (IESALC).

## Key Services

### Airfield Lighting Vaults

- + Constant Current Regulators and 5kV Series Circuits
- + SwitchGear Regulator Systems (SGRS)
- + Generators and Emergency Power Distribution
- + S-1 5kV Cutouts and Enclosures
- + L-823 5kV Breakout Patch Panel Enclosures

### Airfield Lighting

- + Edge Lighting / Centerline Lighting
- + Touch Down Zone Lighting
- + Guard Lights
- + Displaced Thresholds
- + In-Pavement Light Bases in Flexible (Asphalt) or Rigid (Concrete) Pavements
- + Temporary Lighting
- + Approach Lighting Systems – Medium Intensity (MALSR)
- + Approach Lighting Systems – High Intensity (ALSF-1, ALSF-2)
- + Runway End Identifier Light (REIL) Systems
- + Visual Glide Slope Indicator (VGSI) Systems
- + Precision Approach Path Indicator (PAPI) Systems
- + Airport Rotating Beacons
- + Wind Cones
- + Obstruction Lighting
- + Surface Movement Guidance Control Systems (SMGCS)



## Airfield Guidance Signage (LED and Conventional)

### Underground Distribution of Airfield Electrical Circuits

- + Junction Can Plazas
- + Airfield Rated Manholes
- + Airfield Rated Handholes
- + Duct Banks
- + Trenching
- + Directional Boring
- + Direct Buried
- + Lightning Protection and Grounding

### Airfield Controls

- + L-854 Pilot Radio Control Equipment
- + L-821 Relay Based Airfield Lighting Control System (ALCS)
- + L-890 PC Based Airfield Lighting Control and Monitoring Systems (ALCMS)

### Ground Based Navigational Aids (NAVAIDs)

- + Instrument Landing Systems (ILS) - Glideslope
- + Instrument Landing Systems (ILS) - Localizer

### Apron Lighting and Equipment

- + Apron Lighting (LED and Conventional)
- + Ground Service Equipment (GSE)
- + Ground Power Units (GPUs)
- + Visual Docking Guidance Systems
- + Passenger Boarding Bridges (PBB)

### Additional Design Services

- + Support for Federal Aviation Administration (FAA) Facilities
- + Automated Weather Observation System (AWOS)
- + Maintenance and Storage Buildings
- + Aircraft Hangars
- + Helipads and Heliports
- + Vehicular Gate Access Controls Systems
- + Pavement Surface Sensor Systems
- + Construction Safety and Phasing
- + Runway Incursion Mitigation (RIM)
- + Photometric Calculations
- + Photometric Testing Specification
- + Airfield Asset Management
- + Airfield Assessments
- + Airfield Electrical Master Planning
- + FAA Airport Improvement Program (AIP)
- + Voltage Drop Calculations
- + Short Circuit Calculations
- + Arc Flash Studies
- + Selective Coordination Study
- + Engineer Estimate of Probable Cost (EEOPC)
- + Non-Destructive Engineering Investigations
- + Construction Observations
- + Construction Submittal Review
- + Sustainable Solutions

## Representative Clients

- + MSCAA - Memphis Shelby County Airport Authority (MEM)
- + CRAA - Columbus Regional Airport Authority (LCK)
- + PTAA - Piedmont Triad Airport Authority (GSO)
- + GARAA - Greater Asheville Regional Airport Authority (AVL)
- + LNAA - Lehigh Northampton Airport Authority (ABE)
- + PANYNJ - Port Authority of NY and NJ (LGA) (JFK) (EWR) (FRG)
- + WCAA - Wayne County Airport Authority (DTW) (PKB)
- + City of Philadelphia, Division of Aviation (PHL)
- + MPA - Massachusetts Port Authority (BOS)
- + MAA - Maryland Aviation Administration (BWI)
- + SARAA - Susquehanna Area Regional Airport Authority (CYX)
- + CAA - Connecticut Aviation Authority (BDL)
- + SJTA - South Jersey Transportation Authority (ACY)
- + ACAA - Allegheny County Airport Authority (PIT)
- + DRPA Delaware River Port Authority (ILG)
- + St Petersburg-Clearwater, FL Airport (PIE)

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