



# Airfield Electrical

Arora’s airfield electrical practice utilizes their experience and knowledge of current airfield products, standards (FAA, ICAO, UFC, NAVAIR, etc.), and installation practices to provide modern, coordinated, cost-conscious, sustainable, and schedule sensitive design solutions for large, medium, small, non-hub, and general aviation facilities. 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 ACE Certified airfield designers are experienced in cargo, civilian, and military airfield systems and engaged in industry leading organizations such as American Association of Airport Executives (AAAE), Airport Consultants Council (ACC), Illuminating Engineering Society Aviation Lighting Committee (IESALC), Airports Council International (ACI), and the Transportation Research Board (TRB).

## Key Services

### Airfield Lighting Vaults

- + Airfield Lighting Control and Monitoring Systems
- + Individual Light Control and Monitoring Systems
- + 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
- + Fiber Optic and Copper Installation

### Airfield Lighting

- + Airfield Guidance Signage
- + Edge Lighting / Centerline Lighting
- + Touchdown Zone Lighting
- + Guard and Stop Bar Lights
- + Displaced Thresholds
- + Light Bases installed in Flexible (Asphalt) or Rigid (Concrete) Pavements, or Turf
- + Electrical Distribution
- + Temporary Lighting and Signage
- + Approach Lighting Systems – Medium Intensity (MALSR)
- + Apron Lighting
- + Approach Lighting Systems – High Intensity (ALSF-1, ALSF-2)
- + Runway End Identifier Light (REIL) Systems
- + Precision Approach Path Indicator (PAPI) Systems
- + Airport Rotating Beacons
- + Wind Cones
- + Obstruction Lighting
- + Surface Movement Guidance Control Systems (SMGCS)
- + Runway Status Light (RWSL) Systems >>





ATLANTA

BALTIMORE

BOSTON

CHICAGO

DALLAS

DENVER

FORT LAUDERDALE

HOUSTON

LOS ANGELES

NEW YORK

ORLANDO

PHILADELPHIA

PHOENIX

SAN DIEGO

SAN JOSE

SEATTLE

BANGALURU, INDIA

PUNE, INDIA

## Underground Distribution Infrastructure

- + Junction Can Plazas
- + Airfield Rated Manholes and Handholes
- + Airfield Electrical Drainage
- + Duct Banks
- + Trenching
- + Directional Boring
- + Direct Buried
- + Counterpoise and Grounding Systems

## 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)
- + Individual Light Control and Monitoring Systems (ILCMS)

## Ground Based Navigational Aids (NAVAIDs)

- + Instrument Landing Systems (ILS) - Glideslope
- + Instrument Landing Systems (ILS) - Localizer
- + Precision Approach Path Indicator (PAPI)

## 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)
- + In-Pavement Gate Lead-In Lights

## Additional Design Services

- + Support for Federal Aviation Administration (FAA) Facilities
- + Runway Weather Information Systems
- + 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 Existing Condition Assessments
- + Airfield Electrical Master Planning
- + Vertiports
- + 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)
- + City of Philadelphia, Division of Aviation (PHL)
- + MPA – Massachusetts Port Authority (BOS)
- + MAA – Maryland Aviation Administration (BWI)
- + SARAA – Susquehanna Area Regional Airport Authority (CXY)
- + Wood County Airport Authority (PBK)
- + 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)
- + Morgantown Municipal Airport (MGW)
- + Mid-Ohio Valley Regional Airport (PKB)
- + John Glenn Columbus International Airport (CMH)
- + Westchester County Airport (HPN)
- + Jackson-Medgar Wiley Evers International Airport (JAN)
- + Colorado Springs Airport (COS)
- + Denver International Airport (DEN)
- + Southwest Florida International Airport (RSW)
- + Pocono Mountains Municipal Airport (MPO)
- + Hagerstown Regional Airport (HGR)
- + College Park Airport (CGS)
- + Tweed New Haven Airport Authority (HVN)

