

# Introduction to Airfield Lighting Training.

A Program of Initial Airfield Lighting Training

- Crouse-Hinds EATON Airport Lighting has developed a series of Power Point Presentations for airfield lighting maintenance employees.
- These initial "Introduction" presentations are designed for those new to airfield lighting or those without exposure to specific airfield lighting equipment.



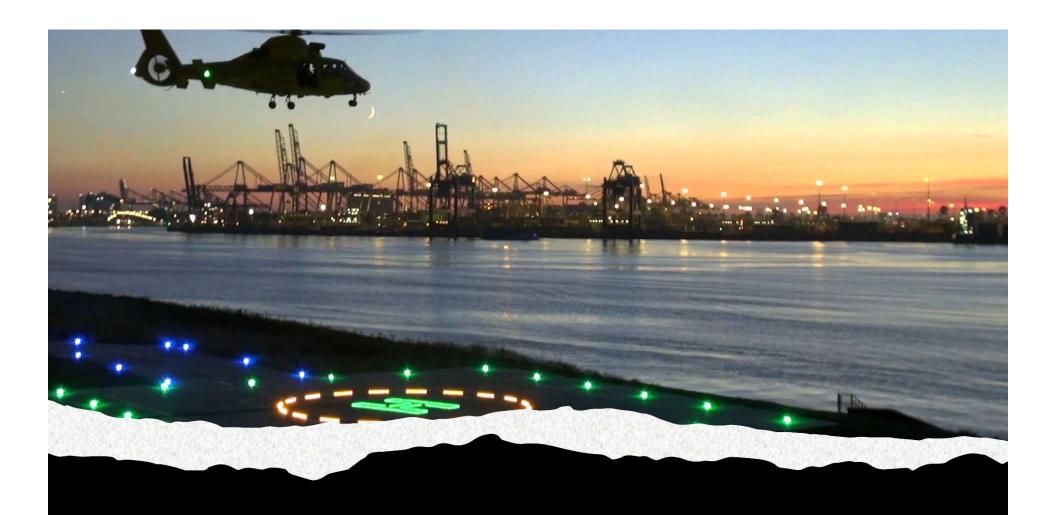
- In the "Introduction" series of Power Point training include:
- Introduction to Airfield Lighting.
- The 4C's Color, Candela Coverage and Configuration.
- Hazards Particular to Airfield Lighting.
- Basic Airfield Series Circuit Lighting.
- Introduction to Constant Current Regulators.
- Introduction to PAPI Systems.
- Each of these classes take approximately two hours to present.



- The introduction series of classes can be followed up by more advanced classes also available.
- These classes focus on specific products and troubleshooting procedures.



- The advanced classes are follow-on classes after taking the introductory classes.
- We refer to the introduction classes as "101" classes and more advanced classes as "102" classes.



The following is our complete list of Power Point classes available.



#### Airfield Lighting General

- Title: Introduction to Airfield Lighting 101.
- Subject Matter: Introduction to airfield lighting and airfield lighting system components.
- Duration: 2 Hours.
- Skill Level: 101
- Title: FAA L-800 Airfield Lighting Equipment 102.
- Subject Matter: Introduction to FAA specified airfield lighting equipment.
- Duration: 2 Hours.
- Skill Level: 102, Customer should have already taken Introduction to Airfield Lighting 101.
- Title: Introduction to Airfield Lighting "The 4 C's" 102.
- Subject Matter: Airfield Lighting Color, Candela, Coverage and Configuration in relation to both inset and elevated airfield lighting fixtures.
- Duration: 2 Hours.
- Skill Level: 102, Customer should have already taken Introduction to Airfield Lighting 101.

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## Airfield Lighting Safety

- Title: Hazards Particular to Airfield Lighting 101
- Subject Matter: Airfield lighting systems safety review. Safety hazards particular to airfield lighting are identified and discussed.

• Duration: 2 Hours

#### Constant Current Regulators

- Title: Introduction to Constant Current Regulators (CCR's) 101.
- Subject Matter: CCR Basic theory of operation. CCR features common to all L-828 CCR's as FAA specified.

- Duration: 2 Hours

- Skill Level: 101

Title: Introduction to Constant Current Regulators (CCR's) 102.

 Subject Matter: Operation of CCRs in both local and remote modes. Standard maintenance procedures and basic CCR Troubleshooting.

- Duration: 2 Hours

- Title: Troubleshooting Specific C-H EATON model CCR's 103.
- Subject Matter: Diagnose and repair specific EATON CCR models. CCR models include 82860F (F, F1 and F2), 82860-D (4-10kW), 82860-D (15-30kW) and 82860-W (10-70kW). Troubleshooting various issues that may arise with electronic Regulation, Remote Control, and Microprocessor PC based components. Troubleshooting and repair of CCR major electrical components such as Transformers, SCR's, Solid State Relays, Capacitors and Contactors.
- Duration: 2 Hours (Each CCR Model). Customer should have already taken "Introduction to Constant Current Regulators (CCR's)" 101 & 102 Classes.
- Skill Level: 103





• Title: Introduction to L-880/L-881 PAPI Systems 101.

• Subject Matter: PAPI System theory of operation, application and operation.

• Duration: 2 Hours

Skill Level: 101

• Title: L-880/L-881 PAPI Style "A" (Voltage Driven) Systems 102.

• Subject Matter: Style "A" PAPI system maintenance, troubleshooting and repair.

Duration: 2 Hours.

Skill Level: 102 Customer should have already taken "Introduction to L-880/L-881 PAPI Systems 101"

• Title: L-880/L-881 PAPI Style "B" (Current Driven) Systems 102.

• Subject Matter: Style "A" PAPI system maintenance, troubleshooting and repair.

Duration: 2 Hours.

Skill Level: 102 Customer should have already taken "Introduction to L-880/L-881 PAPI Systems 101"



#### Airfield Series Circuits

Title: Basic Airfield Series Circuit 101

• Subject Matter: Theory of operation, airfield series circuit components, cutting cable, installing connector kits and operation of the "S1" cutout.

• Duration: 2 Hours

• Skill Level: 101

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#### • Title: Airfield Series Circuit Troubleshooting 102

• Subject Matter: Series circuit troubleshooting methods and proven strategies to locate faults.

Duration: 2 Hours

• Skill Level: 102, Customer should have already taken "Basic Airfield Series Circuit 101"



#### Guidance Signs

- Title: LED Illuminated Airside Guidance Signs AGSF Model
- Subject Matter: Operating,
  Troubleshooting & Repairing (AGSF Fiberglass Body) LED Illuminated Airside
  Guidance Signs.
- Duration: 2 Hours
- Skill Level: 101
- Title: LED Illuminated Airside Guidance Signs AGS Model
- Subject Matter: Operating,
  Troubleshooting & Repairing (AGS -Aluminum Body) LED Illuminated Airside Guidance Signs.
- Duration: 2 Hours
- Skill Level: 101



#### Circuit Selector Switch

- Title: L-847 Circuit Selector Switches 101.
- Subject Matter: L-847 Circuit Selector Switch theory of operation, applications and operation. L-847 Circuit Selector Switch maintenance, troubleshooting and repair.

Duration: 2 Hours.

• Skill Level: 101

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#### Elevated RW Fixtures

- Title: Elevated RW Fixture Maintenance 101
- Subject Matter: Review of FAA guidelines regarding elevated fixture installation and maintenance. Emphasis on elevated fixture "Toe-In" and best installation practices.

• Duration: 2 Hours.

#### Inset Fixtures

#### Title: Inset Fixture Maintenance 101

- Subject Matter: Review of FAA guidelines regarding inset fixture installation and maintenance. Emphasis on proper bolt installation and best installation practices.
- Duration: 2 Hours.
- Skill Level: 101
- Title: Inset Fixture Maintenance 102
- Subject Matter: Inset fixture maintenance. Replacement of lamps, lenses, O-Rings and watertight integrity tests.
- Duration: 2 Hours.
- Skill Level: 102, Customer should have already taken Inset Fixture Maintenance 101.
- Title: L-852G Inset fixture Operation and In Field Programming.
- Subject Matter: Specific product theory of operation, application, operation of programming tablet, maintenance and troubleshooting. In depth review of product manual.
- Duration: 2 Hours
- Skill Level: 102, Customer should have already taken Inset Fixture Maintenance 101.





#### Isolation Transformers

Title: Isolation Transformer 101

 Subject Matter: Isolation transformer theory of operation, testing and troubleshooting.

• Duration: 1 Hours

• Skill Level: 101

# • Title: L-823 "Super" Connector Kits and Cable Assemblies 101

 Subject Matter: Primary and secondary connector kits part number selection and Installation. Cable assembly part number selection. Also discussion on heat shrink and cold shrink kits.

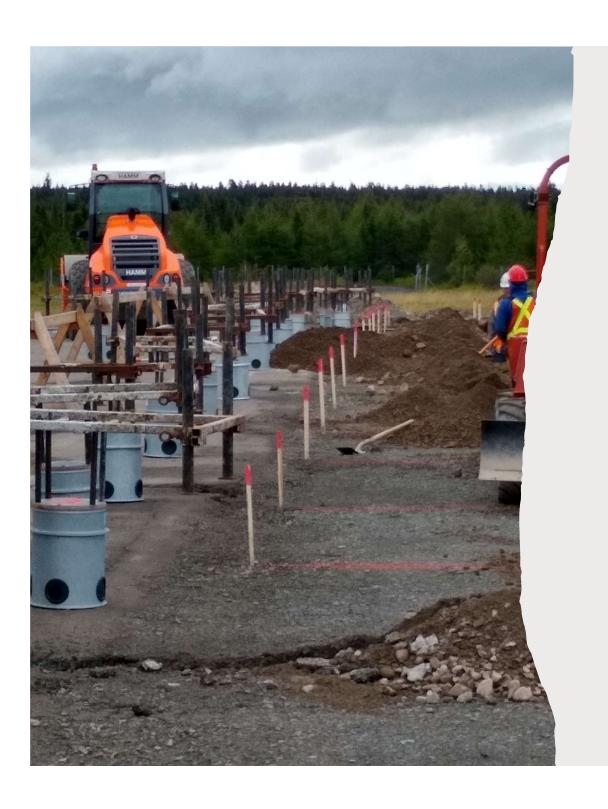
Duration: 2 Hours

• Skill Level: 101

• Title: L-823 "Classic" Connector Kits and Cable Assemblies 101

 Subject Matter: Primary and secondary connector kits part number selection and Installation. Cable assembly part number selection. Also discussion on heat shrink and cold shrink kits.

• Duration: 2 Hours



## Airport Light Bases

Title: L-867 and L-868
 Airport Light Bases 101

 Subject Matter: Discussion on L-867 and L-868 light bases application, part number selection and water/ ice mitigation.

Duration: 2 Hours

• Skill Level: 101

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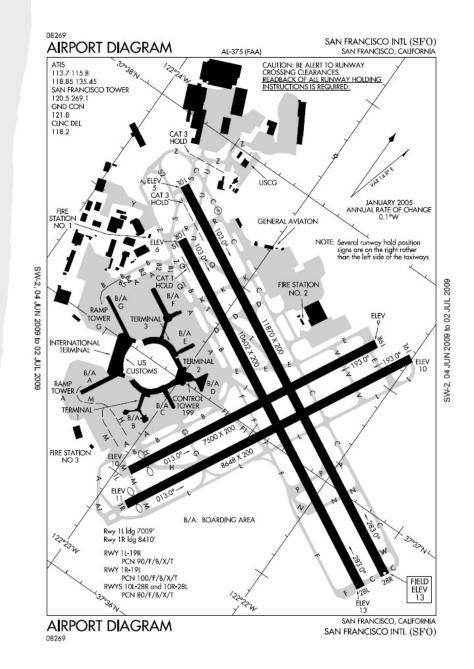
#### Customer Specified Training

- Title: Customer Specified C-H EATON Airfield Lighting Product.
- Subject Matter: Specific product theory of operation, application, operation, maintenance and troubleshooting. In depth review of product manual.

Duration: 2 Hours



- Airfield Lighting Computer Control and Monitoring Systems
- Title: Introduction to ALCMS Airfield Lighting Control and Monitoring Systems
- Subject Matter: ALCMS overview in classroom. Discussion on computer LAN (Local Area Network) communications, Digitrac control and monitoring and computer screen navigation.
- Duration: 2 Hours.
- Skill Level: 101
- Title: Site Specific Advanced ALCMS Airfield Lighting Control and Monitoring Systems 102
- Subject Matter: Site specific computer system overview, "As-Made" drawings review, ALCAMS Safety review, troubleshooting and calibration, Constant Current Regulator and General Element interface to Digitrac devices.
- Duration: 2 Hours.
- Skill Level: 102: Customer should have already taken "Introduction to ALCMS - Airfield Lighting Control and Monitoring Systems" 101.
- Title: Advanced ALCMS Airfield Lighting Control and Monitoring Systems 103
- Subject Matter: Continuation of site specific computer system overview, "As-Made" drawings review, ALCAMS Safety review, Computer LAN communications, Digitrac troubleshooting and calibration, Constant Current Regulator and General Element interface to Digitrac devices.
- Duration: 2 Hours.
- Skill Level: 103: Customer should have already taken "Advanced ALCMS - Airfield Lighting Control and Monitoring Systems" 102.



#### LogicTrac Devices

- Title: Logictrac Device Programming
- Subject Matter: How to address, integrate, troubleshoot and install Logictrac devices. Review of Logictrac programmer product manual.

• Duration: 2 Hours.



