

Generators & Emergency Power

Specifically Designed for Building, Plant and Facility Emergency Preparedness

For a schedule of open enrollment classes or to bring this training to your plant or facility, contact us @

1-877-97-TRAIN

www.AmericanTrainco.com

A 2-day seminar designed to help you understand the types, applications, operation, maintenance and testing of onsite power generation systems

College Credit & Testing Available with this Course

This course now carries American Council on Education (ACE) College Credit Recommendations.

▶ *"A comprehensive and easy-to-understand course for anyone needing to know about standby power."*

From portable generators to cogeneration units – attend this seminar and learn what it takes to make sure your power *never* goes down!



- This seminar can also be presented at your facility for larger groups
 - Reserve Your Space Now! **CALL 1-877-97-TRAIN**
 - Check us out online at **www.AmericanTrainco.com**
- ▶ for a complete listing of all seminars coming to your area

"One of the best courses I've ever taken!"

Paul Knapp - Electrician
-Metro Airports Comm.

Real World Training...for Real World Needs™

▶ **“Great course.
Great Instructor.”**

Don Novak - Electrical Supervisor
Multnomah County Facilities

Generators & Emergency Power

PURPOSE OF TRAINING

From portable generators to standby cogeneration units - from the facility manager to the maintenance technician - this class is designed for *anyone* involved with power generation equipment in their plant or facility.

In today's environment nothing can be taken for granted. Weather situations like tornados, hurricanes, wind and lightning strikes can cause power outages for a few seconds or several days. Earthquakes, explosions and fire can sever lines to your facility. Sometimes we simply experience blackouts because our utility systems are overtaxed in hot weather. Whatever the cause, lack of electricity at your facility can be devastating whether you are a hospital caring for the sick and injured, a treatment plant providing water for your community, a computer oriented business with a world marketplace, or a manufacturing plant that simply can't afford downtime. During this seminar, you will learn what you can do, and should do, to make sure your facility will keep running even if the electricity to your facility doesn't.

TEACHING PHILOSOPHY

“Real World Training...for Real World Needs” is not just our slogan, but also our mission statement. At American Trainco, we approach our students as if they were our own employees. We instruct and guide them in practical knowledge that allows them to immediately go back to their workplace and apply what they have learned. Our instructors are seasoned veterans with years of *real world* experience, and the students who attend our seminars often get more from a few days of training than an entire year of reading textbooks or watching videos. How do we know? They tell us.

Anyone can teach theory, but there simply is no substitution for experience. What sets American Trainco apart is our ability to communicate that experience to our students. As one attendee told us at the end of his two-day training course, “I think I can go back to work now and teach the veterans a thing or two.”

Mission accomplished.

ABOUT OUR INSTRUCTORS

All American Trainco instructors are required to have a formal education and real world work experience. They need to be leaders in their field. We don't hire field people without teaching experience, and we don't hire teachers without field experience. They must have both. And since attendees critique the instructor at the end of each class, a positive and enjoyable learning experience is virtually guaranteed.

TRAINING OUTCOMES

There is a difference between teaching to a curriculum and teaching to a student. At American Trainco we structure our courses with enough flexibility so that the students can take advantage of the vast experience of our instructors. This guarantees that participants will have their specific questions answered during the course of the seminar. And to be 100% certain you get the training you need, students are encouraged to bring schematics and diagrams of the equipment they work on. If you have a unique situation, just let our instructor know. If he can't help you with your specific problem, we'll refund your money - guaranteed!

In addition to answering your specific questions and upon completion of this course, students will receive a training certificate and 1.6 American Trainco Continuing Education Units indicating that he or she has learned:

- Specific requirements and recommendations for the installation, operation and maintenance of onsite generator systems
- Where to find critical information from professional sources such as the EGSA, IEEE, NFPA, NECA and NETA
- What backup system and emergency plan is best suited for your facility
- How to read and understand vendor drawings and technical information
- How and when to successfully test onsite generator equipment
- How to work with parallel energy sources
- Synchronizing procedures and load sharing
- How to troubleshoot using a logical, systematic approach to isolate and repair generator problems

UNAFFILIATED and NON-COMMERCIAL

Unlike some training experiences, you won't get a sales presentation at an American Trainco seminar - all you get is an honest, commercially unbiased education. We do not engage in the practice of selling or promoting other companies' products or services, so you know that by attending one of our seminars, your time and money is well spent.

HIGH IMPACT PRESENTATIONS

Our presentation and classroom material is designed with the student in mind. We know that they don't always have a lot of time to read and study volumes of literature so our manuals are quick and to the point, providing students the same charts, descriptions, pictures and bulleted items they'll see during the instructor's presentation.

WHO SHOULD ATTEND

This course is designed for anyone involved with emergency onsite power generation systems including Facility Managers, Building Owners, Maintenance Managers, Maintenance Technicians, Electricians, Purchasing Agents, and Building Engineers working in... Schools, Hospitals, Water Facilities, Financial Institutions, Research Centers, Industrial & Manufacturing Facilities, Government Buildings, Food Storage Locations, Shopping Centers, Multi-Family Housing Units, Commercial Office Buildings or any other facility where an emergency power supply is absolutely *critical!* In this seminar, attendees come from a wide variety of industries, skill-levels, company sizes, and backgrounds, so if you're not sure you'll fit in or will benefit from this class, don't worry - you will - as long as you have an interest in onsite power generation!

CERTIFICATES-TESTING-COLLEGE CREDIT

After completion of this seminar students will receive a Certificate of Completion and 1.6 CEUs (Continuing Education Units) approved by the Maintenance Training Association of the Americas. Students may also elect to take the MTAA Certification test associated with this topic. Those seeking college credit recommendations must attend both days of this course and successfully pass the MTAA Certification test. This course is recommended by ACE for 1 college credit hour. Transcripts are available through American Trainco.

“Great refresher and resources to help set up our program.” ◀

Mike Zajac - Electrician
CACI International

Reserve Your Space Now! **CALL 1-877-97-TRAIN** Or Online at: **www.AmericanTrainco.com**

C O U R S E O V E R V I E W

In the field of emergency power generation, the ability to understand, maintain, test and troubleshoot your standby equipment is an absolute must. It is no longer acceptable to have your equipment installed and just "assume" that it works! More and more frequently building engineers, maintenance technicians and facility managers are becoming aware of the critical role proper electrical energy planning plays in the survival of their facility in the event of a power outage. This course is designed to take the mystery out of onsite power generation and provide you the peace of mind knowing that your facility is ready for anything!

Our seminar begins with an introduction to the basics of generators and prime movers including a review of basic electrical fundamentals and the different generator types. Next, the student will be taken through typical generator and engine control systems. Recommended maintenance and testing activities are also covered during this discussion. Students will then learn the basics of parallel operation; from synchronizing procedures to load sharing, and how to adjust KVAR's to control the power factor. Proper applications of various generators for your facility will be discussed before troubleshooting exercises are introduced to hammer home what the students have learned. Upon completion of this seminar, students will be able to go back to their workplace and immediately apply what they have learned.

The following is a listing of topics to be covered in the class...

Generators and Prime Movers

- Overview: Generator Purpose, Operation & Control
- Types of Prime Movers
- Generator Basic Electrical Fundamentals
- Generator Types and Construction
- Grounding and Bonding of Generator Systems
- UPS System Fundamentals

Protection and Transfer of Electrical Power

- Circuit Breakers
- Switchgear
- Transfer Switches
- Parallel Operation

Generator and Engine Controls

- Governors
- Voltage Regulators
- Engine Protection
- Onsite Generator Controls including PLCs and SCADA Systems

Auxiliary Systems

- Fuel Systems
- Cooling Systems
- Exhaust Systems
- Vibration Attenuation
- Sound Attenuation
- Engine Starting Systems
- Load Banks
- Emissions Control

Generator Applications

- Cogeneration
- Emergency Power Systems
- Legally Required Standby Systems
- Optional Standby Systems
- Applicable Codes and Standards

Troubleshooting and Maintenance of Onsite Power Generation Systems

- Developing a Logical Systematic Approach to Troubleshooting
- Common Generator Problems
- Recommended Generator Maintenance Practices
- Electrical Testing of Generators

SEMINAR AGENDA

7:30 am	Registration
8:00 am	Class Begins
12:00 - 1:00 pm	Lunch (on your own)
4:30 pm	Class Ends

SEMINAR FEES

\$985 Both Days

NO-RISK REGISTRATION & MONEY-BACK GUARANTEE

If you're not sure you'll be able to attend this seminar, you can still make a reservation to hold your space in class. While payment is due prior to the start of the seminar, you may choose a full refund or credit for cancellations made at least 24 hours in advance. Student substitutions can also be freely made at any time prior to the start of the seminar. Refunds will not be issued for registered attendees who fail to show up and have not given a notice of cancellation. In the rare event that you do not receive the expected value after attending our seminar, simply notify us in writing of your reasons and your money will be promptly refunded.

IN-HOUSE TRAINING

You can bring this or any other maintenance training program directly to your plant or facility. Simply call us and tell us what you're looking for. In addition to our own American Trainco seminars and instructors, we have established relationships with literally hundreds of other expert instructors and consultants who conduct training in virtually all areas of maintenance; and our custom training staff is among the most experienced in the industry. Chances are good we will be able to meet your needs.

Call **1-877-97-TRAIN** and ask for Dan or Adam, or email AdamC@AmericanTrainco.com.

Some of the other training topics we can bring to your site include:

- **Basic Electricity for the Non-Electrician™**
- **Electrical Troubleshooting**
- **Air Conditioning & Refrigeration**
- **Boiler Operation, Maintenance & Safety™**
- **Arc Flash Protection & Electrical Safety™**
- **2008 National Electrical Code®**

And 20+ other courses in the following areas:

- **Electrical / Electrical Controls**
- **HVACR**
- **Mechanical**
- **Facility & Plant Management**
- **Fluid Power**
- **Pumps / Piping**

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"Refreshing...practical knowledge that is immediately useful."

Gerald Boles - Project Engineer - Engineering Economics, Inc.

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"Great Class - will recommend to everyone"
 Dale Mayer - Supervisor
 Norlight Telecom

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SEMINAR FEE
\$985 Both Days

FIVE EASY WAYS TO REGISTER:

- 1) **Internet** www.AmericanTrainco.com
- 2) **Fax** (303) 531-4565
- 3) **Phone** Toll Free 1-877-97-TRAIN 1-877-978-7246 or (303) 531-4560
- 4) **Mail** this form to: American Trainco, Inc. P.O. Box 3397 Englewood, CO 80155
- 5) **E-mail** the information requested on this form to: Sales@AmericanTrainco.com

Authorizing Person/Supervisor: Name _____
 Title _____ Company Name _____
 Address _____
 City _____ State _____ Zip _____
 Phone _____ Fax _____ Email _____

Seminar Attendees:	Name	Title	E-Mail	Seminar City

Billing Information: (Please fill out this section only if the "Bill To" name and address is different than the Authorizing Person's name and address above.)

Individual's Name _____ Title _____ Company Name _____
 Address _____ City _____ State _____ Zip _____
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1-877-97-TRAIN

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PO Box 3397
 Englewood, CO 80155



PROMOTION CODE

X05