

**2019 Elevator U Educational Program  
University of North Carolina – Charlotte – Continuing Education  
Approved Credits – 5/8/2019**



All courses outlined below are intended for the educational advancement of Managers, Engineers, Foreman, Supervisors, Technicians, or anyone involved in the vertical transportation industry.

**1. Elevator Research at American Universities 1890 - 2000 (Approved for 1.0 CEU for CET & CAT – NAEC)**

**Time: 1 Hour**

**Presenter: Dr. Lee Gray, University of North Carolina - Charlotte**

Presentation Summary

My presentation would cover the various types of elevator related research that has occurred at American universities from 1890 to 2000. Examples include evaluations of new systems (the electric elevator in the early 20th century), pioneering the design of new systems (the high-rise direct plunger elevator in the early 20th century), and evaluating new operational systems (the impact of operator-less elevators on users in the 1950s). While most of this work occurred off campus, there are a few instances of students using university elevators in their investigations.

Brief Bio

*Dr. Lee Gray is the senior associate dean in the College of Arts + Architecture at the University of North Carolina at Charlotte and a professor of Architectural History in the School of Architecture. He received his PhD in Architectural History from Cornell University, his master's in Architectural History from the University of Virginia and undergraduate degrees in Architecture from Iowa State University. He is the author of *From Ascending Rooms to Express Elevators: A History of the Passenger Elevator in the 19th Century* (available at [www.elevatorbooks.com](http://www.elevatorbooks.com)). Since 2003, he has written monthly articles on the history of vertical transportation for ELEVATOR WORLD. His current projects include a book on the history of escalators and moving sidewalks. He also serves as the curator of [theelevatormuseum.org](http://theelevatormuseum.org), created by ELEVATOR WORLD.*

## 2. Elevator Selection for Low-Rise Buildings (Approved for 1.0 CEU for CET & CAT – NAEC)



Time: 1 Hour

Presenter: Travis Hall, Alliance Elevator Solutions

### Presentation Outline

Elevators are integral to accessible, smooth, and efficient operations in many applications. For low-rise buildings, hydraulic or gearless machine room-less (MRL) elevators are most common; this course presents the differences between the two in installation, maintenance, speed, energy efficiency, sustainability, and cost. Also addressed are the distinctions between proprietary and nonproprietary elevator systems and recommendations on how to specify a nonproprietary system to maximize its long-term benefits.

### Brief Bio

*Travis Hall General Manager & Partner at Alliance Elevator Solutions (AES) As an innovator at heart, I've always been the kind of guy who loves to think outside the box especially when it comes to running a business. If there's a problem or a new way to do something, you can bet I'll be working on solving it or dreaming it up! This passion for "more" has lead me on an incredible journey professionally, as I've worked around the world in various positions for global manufacturing companies, both in the European and North American heavy equipment and elevator industries. With all that traveling, it's ironic that life has lead me to run AES out of a small rural town in Pennsylvania. I've been fortunate to have learned from some the best in the field, and it's given me a passion to support who I've found to be the hardest working folks in the industry – the independent elevator contractor. AES is the first non-propriety elevator manufacture focused solely on supporting the independent contractor from the ground up, and we've got big plans for the continued growth of the elevator industry. When I'm not servicing the elevator industry, you can find me on my boat at Lake Raystown, training for my next obstacle race or spending time with my 2 sons. If you ever want to talk elevator, you can reach me at THall@AllianceElevator.Net.*

*Professional Experiences at a Glance: - GM & Partner - Alliance Elevator Solutions (8 years)  
Engineer / Sales - DL Martin Company (Schindler's top 5 Supplier)  
Sales / Service Instructor – Volvo Construction Equipment and JLG  
United States Air Force 6 years active duty Education  
Master of Business Administration - Penn State - B.S. Engineering – Bellevue University/University of Nebraska  
Associates in Aerospace Maintenance - Community College of the Airforce*

### 3. The Future of Elevator Maintenance and What Creates a Beneficial Elevator Consulting Experience



**Time: 1 Hour**

**Presenter: Mike Smith, VDA (Van Deusen & Associates, Inc.)**

Presentation Outline	Past
A Good Consulting Experience	Everything was scheduled via check chart In most cases, sold as preventive
Do Your Due Diligence	Frequency of examine:
Size of firm	Weekly (Escalators & High-Speed Traction)
Expertise	Semi-Monthly (Traction Elevators)
Past Experience (Let them exclude themselves)	Monthly (Hydraulic Elevators)
Proximity	Paper recordkeeping
Understanding of Codes (Local & National)	Safety testing – tagged Physical supervision was key
Interview	Present
What does your gut say?	Almost nothing is scheduled, and care is based on use
Do they match your style?	The word “preventive” is eliminated
Do they understand your wants/needs?	Frequency of examine:
Can they be trusted?	Monthly (Escalators & Traction Elevators)
Are you confident in their ability to represent your interests?	Quarterly (Hydraulic Elevators)
Examples of clout with Elevator Contractors (Local & National)	Online recordkeeping
Cost vs. Value received/perceived	Safety testing – still tagged Consulting oversight has replaced supervision
Deploy	Obsolescence
Timely	When in doubt, bill it out
Coordinate activities well	Future
Monitor progress without constant reminding	Everything online
Strive to get the best for you	Frequency of examine may be eliminated
Understand design life and importance of maintainability	Safety testing will always exist Obsolescence could be eliminated if coverage of repairs is not included
Elevator Maintenance-Past, Present & Future	Budgeting of maintenance costs will be pushed to ownership

#### Brief Bio

*Mr. Smith, is a graduate of William Paterson University with a B. A. in Business Administration and progressed through management positions in sales/marketing and operations in the elevator industry before joining VDA in 1994 as General Manager. As General Manager, he was responsible for executive management of all the firm's branch offices. Prior to his current assignment, he served as Senior Vice President for all branch operations and headed the marketing and business development functions for VDA's headquarters office. He was named President in 2011, and is the firm's principal-in-charge of administration, and serves as manager of selected major projects for which the firm provides services.*



#### 4. The Advantage to a Complete Control System Package

**Time: 1 Hour**

**Presenter: Tom Reamsnyder, Virginia Controls Inc.**

##### Presentation Outline

We will outline a complete engineered controller system package and the advantages of this system. We cover the components that are included in our system such as the main controller, car top controller/junction box (w/integral inspection station), absolute positioning system, door zone detection system, and custom color coded and numbered travel cable. We will focus on the detailed advantages of these components being sourced from one manufacturer from the technical side as well as the advantages on the field labor side.

##### Brief Bio

*Instructor: Tom Reamsnyder, BSEE, of Virginia Controls, Inc.*

*Manager of Product Development with 32 years at Virginia Controls and +35 years in elevator controller design applying all types of DC & AC motors and drives including the latest Regen & PM (Permanent Magnet) AC technology, and most recently overseeing the development of the Vision controller product line – VCI's 3<sup>rd</sup> & 4<sup>th</sup> generation non-P.L.C., u-Processor based controller.*

#### 5. Working with AC Drives on Various Elevators (Approved for 1.0 CEU for CET & CAT – NAEC)

**Time: 1 Hour**

**Presenter: Jeff Johnson, Magnetek**

##### Presentation Outline

Attendees participating will be able to better understand the ease when modernizing with an AC elevator system. We will be showing how to size, install, and program AC elevator drives. The participants will learn how to use on-line tools to help with drive sizing or energy savings, and how computer, web, and smartphone tools will benefit you in the field.

##### Brief Bio

*Jeff Johnson is a Magnetek Business Development Manager for its AC Elevator Drives business. He has extensive experience in AC drives, industrial control technology, and sales. Mr. Johnson earned a Bachelor's Degree in Electrical Engineering Technology Studies from the Milwaukee School of Engineering. His initial exposure to the AC drives market began in the late 1980's while he worked for Rockwell Automation.*



**6. Job Hazard Analysis/Personal Safety to Live By (Approved for 0.15 CEU – NAESA) (Approved for 1.5 CEU Safety – NAEC)**

**Time: 1.5 Hour**

**Presenter: Bob Shepherd, NAESA**

Presentation Outline

This training course is an interactive and intended to teach the numerous requirements and show methods used in creating and using a Job Hazard Assessment.

The training session will take the attendee through JHA requirements found in OSHA, OHS, EIFESH and NFPA 70E used to create a Job Hazard Assessment. (JHA)

The intent of this safety course is to familiarize the attendees with and the need to continuously use JHA's and their responsibilities within the process. The goal being everyone has a part to play when it comes to the JHA. It is strongly encouraged that a copy of EIFESH be brought to this class.

Snap Shot of Very Personal Safety: Safety is not just a stand-alone jobsite consideration, much more home safety housekeeping is required!

Brief Bio

*Bob entered the elevator industry with the IUEC as a field helper in 1972 and had been employed by Otis Elevator since 1980. He held the position of Manager Codes/Product Quality BIS, Otis Elevator North America. Mr. Shepherd attended Kutztown State College where he majored in Elementary Education. He is the Executive Director of NAESA, member of several boards and is QEI Certified. Bob does not like wearing ties and feels much better wearing jeans, boots and a sweatshirt. Bob's motto: "Stay Safety Pinned and Keep your Promises for Life"*



## 7. Long Term Planning

**Time: 1 Hour**

**Presenter: Rob Dirscherl, Kone**

### Presentation Outline

I would like to address the issues of keeping vertical transportation reliable, with minimum down time for repairs. I was sent to The University of Penn by Otis Elevator Company in early 2001 to manage the account as a Troubleshooter/Adjustor/Supervisor. The previous contractor left the campus in total disrepair and we were averaging 30-40 trouble calls daily. I knew the Band-Aid approach was not going to work.

I met with the University Engineer and Directors to suggest that we institute a top 10 elevator renewal plan per fiscal year, but I wanted to base this list on data, not just age and obsolescence. We also catered our maintenance to focus more time on the high usage buildings. With approximately 280 elevators and escalators, we have brought our call out rate to around 5 to 6 a day, including the nuisance calls (running on arrival, fire service, independent service, etc.). We have also retrofitted all units with a self-diagnostic phone because more than half the phones did not function in 2001. We have monthly meetings to discuss issues and possible improvements that can be made for safety and performance. I will also discuss contract language that the university has in place that holds the vendor to a high level of maintenance. I currently work for Kone at Penn, the University asked me to stay with multiple changes in Vendors.

### Brief Bio

*31 years of experience in IUEC Local 5 with installing, modernizing, maintaining, and surveying vertical transportation for various facilities and companies.*

*Education: NEIEP Apprenticeship Program, Cleveland School of Electronics, Solid State Theory and Application, Dale Carnegie Customer Service Training, general studies at Temple and CCP, Otis, Kone, Swift, MCE, Schindler Technical Training Courses.*

*Currently, and for the past 16 years, have been the Site Supervisor for UPenn. Responsible for the day to day operations, maintenance, repair, testing, etc.*



**8. Elevator Door Protection 2019 (Approved for 0.1 CEU – NAESA)  
(Approved for 1.0 CEU for CET & CAT – NAEC)**

**Time: 1 Hour**

**Presenter: Matt Davies, Janus**

Presentation Outline

A17.1 'Safety Code for Elevators and Escalators' will be undergoing a major update in late 2019. A section which will see significant change is the requirements for elevator door protection. The presentation will cover a brief background on the process for revising the code, a overview of the technologies currently used for door protection and a comprehensive review of the changes for 2019 and how these will improve elevator safety and potentially reduce elevator door damage.

Brief Bio

*I've been in the Elevator Industry for just over four years.*

*I started out as the Global Product Manager for the Elevator Emergency Telephone range at Avire (Avire is the parent brand of Janus Elevator) and then moved on to create our Innovation program.*

*I'm now the Market Insight and Innovation Manager for the Americas, Europe, India, Middle East and Africa. My role is to ensure that we understand each of these territories' market needs & trends and that we are delivering innovative products that solve genuine problems for elevator contractors and elevator owners. A key part of this role is also being our internal 'codes & standards expert'; as such I attend the ASME AD Hoc Committee on Elevator Door Protection meetings and I am a member of the European Lift Association (ELA) Tele Alarms Working Group.*

*Prior to joining the elevator industry I worked in the semiconductor industry for nine and half years. Seven of those years I specialised in solid state lighting, working to persuade manufacturers of lighting fixtures to move away from traditional light sources to LED based solution.*

## 9. Facility Management Best Practices – Elevator Design Criteria & Specifications



**Time: 1 Hour**

**Presenter: Kevin Morse & Dale Hughes, Elevator Logic, LLC**

### Presentation Outline

Building and safety codes establish minimum design and operational requirements for elevator systems and for building systems that interface with the elevator. However, performance language used in the codes results in a multitude of different, and often conflicting, interpretations by state & local jurisdictions. Established uniform criteria provide the basis for standardized design, effective sustainment, and consistent safety code compliance. Design criteria topics will include proper application of elevator types, fire alarm & fire protection, emergency power systems, electrical branch circuits, hoistway pit entrapment protection, and more.

### Brief Bio

*Kevin Morse, Elevator Logic, LLC*

*Education: BA, Economics, University of Maryland*

*Experience:*

*VTE Program Manager, Naval Facilities Engineering Command, 1992 - 2019*

*Elevator Constructor/Mechanic, IUEC Local 10, Washington, D.C., 1975 - 1989*

*NAVFAC & NAESA Certified Elevator Inspector & Inspection Supervisor, 1989 - present*

*ASME A17.1 Elevator Safety Code Committee Member, 1996 - present*

*Dale Hughes, Elevator Logic, LLC*

*Experience:*

*Deputy VTE Program Manager, Naval Facilities Engineering Command, 1996 - 2019*

*Elevator Constructor/Mechanic, Virginia Beach, VA, 1978 - 1989*

*NAVFAC & NAESA Certified Elevator Inspector & Inspection Supervisor, 1990 - present*



## 10. Effects of Improperly Maintained Hydraulic Oils in Elevator Components (Approved for 1.0 CEU for CET & CAT – NAEC)

**Time: 1 Hour**

**Presenter: Doug Muennich, RelaDyne**

### Presentation Outline

Our presentation seeks to inform attendees of the dangers of improperly maintained hydraulic oils within their hydraulic elevators. Improper maintenance can and will lead to:

- Component failures leading to extended downtime, monetary loss in repairs
- Safety issues including leveling issues

### Brief Bio

*Doug Muennich has more than 25 years of experience as a Certified Lubrication Specialist through the Society of Tribologists and Lubrication Engineers (STLE). He currently leads the Varnish Mitigation Business Development efforts of RelaDyne. Muennich has spent the last 15 years focusing on the problems and solutions associated with oil oxidation and the formation of varnish.*