

Welcome & Introduction

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VP – Engineering

N-Com Inc.



ACE / Association of
Communication Engineers

ACE Purpose and History

- Association of Communication Engineers
- Founded in 1950 (one year after start of REA Telephone program in 1949)
- A national non-profit association of firms providing professional engineering services to the telecommunications industry.
- One of ACE's primary objectives: To maintain professional standards as legally required and as outlined in the code of ethics of the National Society of Professional Engineers.
- ACE serves the telecommunications industry through coordination efforts with various professional organizations, industry associations and government agencies to advance and maintain initiatives, contracts, standards, and practices of benefit to the industry as a whole.



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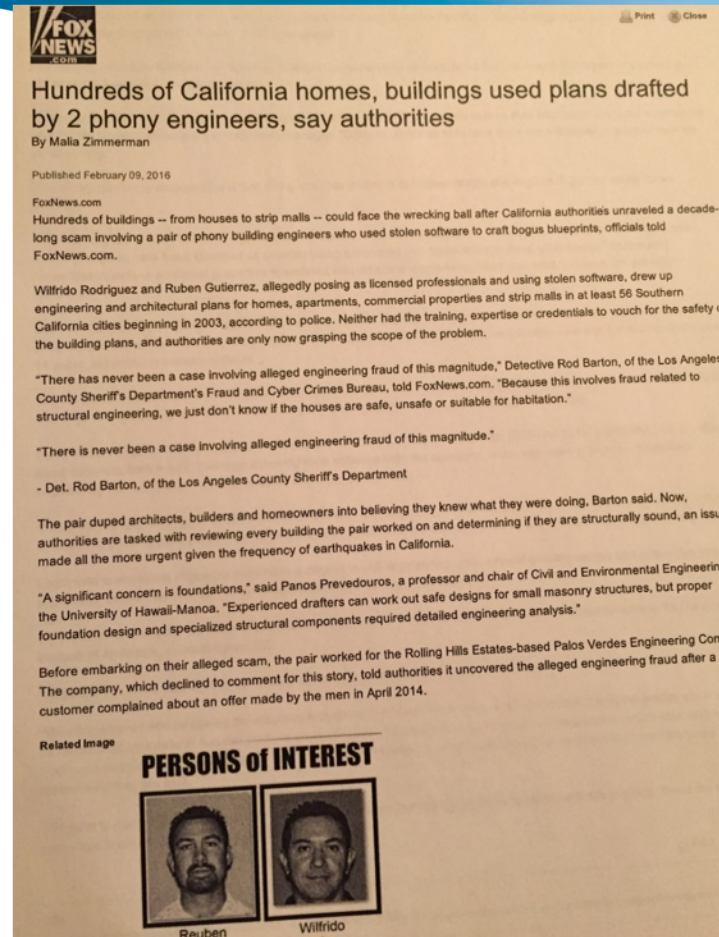
Professional Engineering

- Why do states license engineers and regulate engineering firms?
 - To protect the health, welfare and safety of the public by ensuring the practice of engineering is only carried out by qualified persons
 - PE license requires combination of education, experience and exams
 - Only firms with a PE in responsible charge may offer engineering services
 - Most states require a certificate of authorization (COA), which lists names and license numbers of individuals in responsible charge
 - Engineer in responsible charge must be full-time employee
 - <http://ace-engineers.com/links/> “How to Verify PE License”
 - All of this leads to Accountability



Example of Recent Engineering Fraud

“Neither had the training, expertise or credentials to vouch for the safety of the building plans, and authorities are only now grasping the scope of the problem....”



Telecommunications Engineering

- Includes elements of:
 - Electrical, electronics and communications
 - Information and traffic theory
 - Civil, construction, structural
 - Mechanical, materials
 - Computer networking
 - Industrial - project management & engineering economics
 - Project Management – art of balancing budget, schedule, and quality
 - Environmental
- Public Safety is often a clear consideration: e.g. construction in proximity to other critical utilities, towers, grounding, and critical communications facilities.
- Proper planning, design and implementation of telecommunications infrastructure requires understanding and proper application of the National Electrical Safety Code (NESC) and National Electrical Code (NEC).



ACE Members committed to the NSPE Code of Ethics

- NSPE Ethics (at <http://www.nspe.org/resources/ethics/code-ethics>)
 - Hold paramount public safety, health & welfare
 - Perform services only in areas of competence
 - Issue public statements only in objective and professional manner
 - Act for each client as faithful trustee
 - Avoid deceptive acts
 - Conduct self honorably, responsibly, ethically and lawfully so as to enhance the honor and reputation of the profession
 - Disclose known and potential conflicts
 - Not soliciting or accepting valuable consideration from third parties such as vendors and contractors
 - Confidentiality



ACE Activities in support of Rural Telecom

- ACE maintains dialogue and coordination with industry organizations
 - NTCA and PCCA (Power & Communications Contractors Assoc.)
- Recent ACE activities with RUS
 - ACE comments on RUS contract, unit and procedure updates
 - 395 new special equipment contract - discussion and formal comments
 - 515d service entrance facilities discussion
 - Recent RUS invitation to participate in a DHS Section 106 Industry Day event at the White House Conference Center on March 15. Topic was challenges faced on telecom construction projects related to Section 106 of the National Historic Preservation Act (NHPA) permitting processes.



Welcome to 2016 ACE School & RUS Symposium

...and there will be a test.



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