

What it takes to create a certification program

“IF YOU’RE GOING TO DO SOMETHING, do it right.” I can assure you that this cliché holds true with the ETCP Council. Creating an exam program, let alone three, is an exhaustive process, and ETCP is sticking to the rules of the trade. Many people ask me, “Why is this testing process so expensive?” Or, “Why do you have to go through all this work just to write an exam?” The reason is simple. If we want the examination recognized as valid, professionally sound, and legally defensible, we have to follow the national guidelines for certification.

When an organization is considering creating a certification, there are four broad areas (job analysis, test development, test administration, and scoring) essential to any professionally sound and legally defensible examination to be considered. By professionally sound, we mean the instruments have a basis for establishing their validity and reliability, while legal defensibility provides for their use in the employment arena.

With the help of AMP (ETCP’s hired psychometric firm), ETCP follows the leading professional and technical guidelines such as those detailed in the Standards for Educational and Psychological Testing (1999) by the American Educational Research Association, the American Psychological Association, and the National Council on Measurement in Education, including federal and legal regulations such as the Uniform Guidelines on Employee Selection Procedures (1998), which provide the research framework that may be used as a basis for validity of certification and licensing testing programs. The detailed methodology AMP follows with each certification program complies with these current professional and governmental standards to assure the defensibility of the finished product, as well as meeting the standards of the National Commission for Certifying Agencies (NCCA), the accrediting arm of the National Organization for Competency Assurance (NOCA).

The four broad areas involved in creating a certification program which ETCP has followed are:

Job analysis

The heart of any credentialing program is the job analysis; a systematic process of collecting, analyzing, and documenting judgments made about important information related to the nature of a job. Appointed by the ETCP Council, subject matter experts (SMEs) in the industry were selected to provide technical assistance during the job analysis. Initially, these individuals are asked to submit task

statements (a specific written format that describes an identifiable work activity) to AMP. From these statements, AMP prepares a job analysis questionnaire consisting of a set of instructions, list of job activities, rating scales, and pertinent demographic questions. This material is then reviewed and finalized in a meeting with the SMEs.

ETCP sent the questionnaire to a representative sample of technicians for each examination for completion online. After the data was entered from hundreds of technicians across the US and Canada, it was analyzed to identify major and sub-content categories. In a second meeting the SMEs reviewed the results of AMP’s analysis and developed the job-related test content outline (blueprint) that is used for item development. This outline includes a description of the major content domains, sub-content domains, and number of items. These outlines can be found on the ETCP website and within the ETCP Candidate Handbooks.

Test development

Following the approval of the test content outline, an item writing workshop was conducted with SMEs by AMP to generate items (questions) for the examination. During this workshop, SMEs are taught the basic skills necessary for writing high quality items, and the first batch of items is produced.

At a separate meeting, items are reviewed using AMP’s item banking/test construction software and projection equipment to ensure they are classified correctly, worded properly, contain only one correct answer, and are not offensive to protected classes. Additionally, a draft test form is reviewed and an Angoff passing point study is conducted (one of the criterion-referenced—or absolute standard—methods accepted in the industry). The SMEs rate each item, and the ratings of the items are aggregated to suggest the appropriate passing point of the items. Angoff values are collected for each item such that, in time, it may be possible to associate an Angoff value with every item in the pool.

Test administration

Application processing and scheduling

The ETCP office receives and answers candidate inquiries, and distributes applications and handbooks. Upon receipt of an application, ETCP’s staff reviews it for completeness, inclusion of appropriate fee, and verifies the work history.

The administration for the first electrical examination (as well as

for both rigging exams) will be held in conjunction with LDI in Las Vegas, NV in October 2006.

For applicants who can not make it to LDI, the electrical examination will be available at computer based testing (CBT) centers in early 2007, as well as in select cities in late 2006. Currently at these CBT sites, the arena and theatre examinations are offered nearly every business day. To apply for one or both of these rigging examinations, fill out

the computer based testing application form, and send the completed form and fee to ETCP. After the candidate has received written acceptance from ETCP, information will be sent on how to schedule the examination at a site, time, and date that is available and most convenient.

AMP assessment centers are available for CBT testing throughout the year at 150 sites geographically distributed across the US, with at least one site in every state and

multiple locations in the larger and more populated areas. Additional sites are available in Canada, Mexico, and overseas.

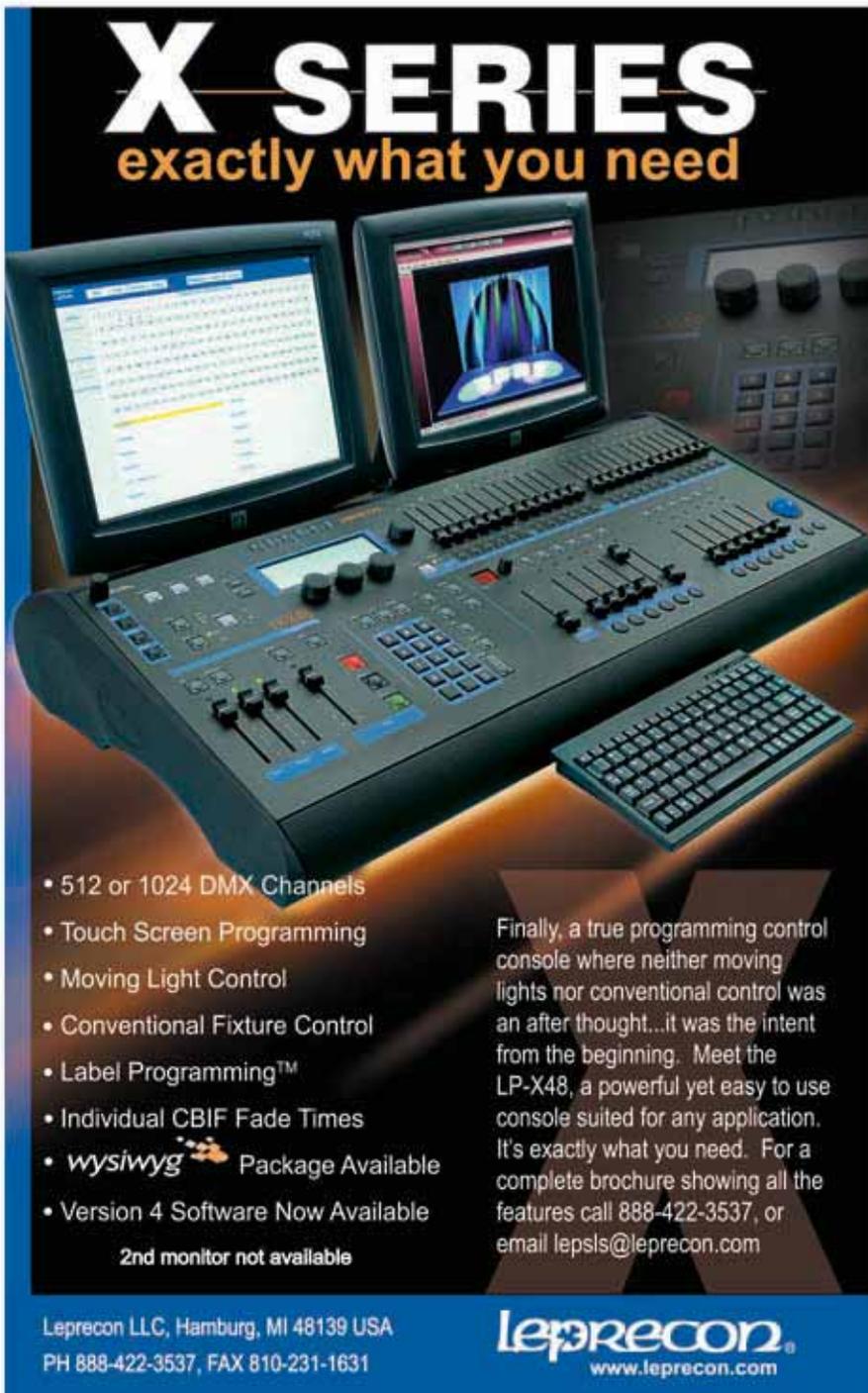
AMP administers all tests using experienced testing proctors. Test center staff selected for use in administrations are screened and trained by AMP's test administration staff. The training and procedures for test administration are well developed.

Scoring

Each candidate will receive his/her score report upon completion of the examination or by mail shortly following the exam administered at the computer testing sites. Examination scores for paper and pencil administrations are sent by mail within six to eight weeks following the examination.

The methodology used to set the minimum passing score is the Angoff method, applied during the performance of a passing point study by a panel of experts in the field. The experts evaluate each question on the examination to determine how many correct answers are necessary to demonstrate the knowledge and skills required. A candidate's ability to pass the examination depends on the knowledge and skills displayed, not on the performance of other candidates.

Passing scores vary slightly for each version of the examination. To ensure fairness to all candidates, a process of statistical equating is used. This involves selecting an appropriate mix of individual questions for each version of the examination that meet the content distribution requirements of the examination content blueprint. Because each question has been pre-tested, a difficulty level can be assigned. The process then considers the difficulty level of each question selected for each version of the examination, attempting to match the difficulty level of each version as closely as possible. To assure fairness, slight variations in difficulty level are addressed by adjusting the passing score up or down, depending on the overall



X SERIES
exactly what you need

- 512 or 1024 DMX Channels
- Touch Screen Programming
- Moving Light Control
- Conventional Fixture Control
- Label Programming™
- Individual CBIF Fade Times
- **wysiwyg** Package Available
- Version 4 Software Now Available

2nd monitor not available

Finally, a true programming control console where neither moving lights nor conventional control was an after thought...it was the intent from the beginning. Meet the LP-X48, a powerful yet easy to use console suited for any application. It's exactly what you need. For a complete brochure showing all the features call 888-422-3537, or email lepsls@leprecon.com

Leprecon LLC, Hamburg, MI 48139 USA
PH 888-422-3537, FAX 810-231-1631

Leprecon
www.leprecon.com

difficulty level statistics for the group of scored questions that appear on a particular version of the examination.

I hope this answers some questions

about what is involved in making an excellent testing program. Please feel free to contact me at kgeraghty@esta.org or 212.244.1505 if you would like more

information about what the certification process entails, or if you have questions regarding ETCP. ■

ETCP FREQUENTLY ASKED QUESTIONS

What will this certification do for me? ETCP helps qualified riggers and electricians distinguish themselves by giving them a credential—ETCP Certified—that unmistakably says, “I know what I am doing.” ETCP Certification helps employers immediately identify riggers and electricians with proven capabilities. Employers have already begun using the ETCP website when seeking qualified personnel.

Many major employers and unions have devoted numerous hours and dollars to this program with the intention to integrate this certification into job bids, contracts, specifications, etc. Service contracts are already requesting, and in some cases demanding, ETCP personnel. There are three insurance companies that will soon underwrite liability insurance for ETCP Certificants.

When is the next examination and how do I apply? ETCP electrical examinations are being offered in select cities at the end of 2006. In early 2007, the examinations will be offered nearly every business day at over 150 computer centers across the US, Canada, and other locations around the world. The rigging examinations are now available at these computer centers. To apply for one or both of these examinations, fill out the computer based testing application form, and send the completed form and fee to ETCP. After the candidate has received written acceptance from ETCP, information will be sent on how to schedule the examination at a site, time, and date that is available and most convenient.

Will this electrical certification prove me to be a “qualified person” as defined by OSHA and NEC? The goal of ETCP is for technicians to use ETCP Certification as a support in claiming oneself “qualified personnel.” The ETCP Council is in the beginning stages to make this objective (authorities having jurisdiction accept this certification) a reality.

How should I study for the exams? Broad-based knowledge of each field will be tested. Therefore, candidates are encouraged to gain knowledge, skills, and abilities in all areas in the content outline. ETCP recognizes there is a demand for resource material and training courses to aid in examination preparation. In accordance with national standards, ETCP does not endorse, support, or provide examination preparation materials or courses. However, a list of seminars and bibliography information can be found on The ESTA Foundation website: <http://www.estafoundation.org/seminars/resources.htm>.

Many electricians and riggers are forming study groups to prepare for the examination. Investigate if there are any in your area by contacting the union local or your peers.

Do I have to memorize all of the formulas?

For the electrical examination, most complex formulas will be provided in the examination, but basic (Ohm’s Law, Watt’s Law, etc.) will not be given. For the rigging examination, many formulas are provided as well. The goal of the examinations is to test knowledge and not memorization skills. Not all of the formulas will be provided within the examination, so candidates are advised to study all relevant formulas.

How do I renew my certification? Do I have to take the test again?

There are a variety of ways you can maintain your certification without re-taking the examination, including (but not limited to): work experience, training classes, standards writing, and teaching. For more information regarding certification renewal, please visit the ETCP website at: http://www.etcp.esta.org/cert_renewal/rigging_renewal.htm.

How do I get more information?

Candidate information (including eligibility requirements and applications) is available on the ETCP website <http://etcp.esta.org>, or if you would like the information mailed to you, please contact Katie Geraghty, ETCP Certification Director, at 212.244.1505 or kgeraghty@esta.org.

For more FAQs, visit the ETCP website at etcp.esta.org.

Insurance for ETCP Certified Riggers

PRISM, Inc., the ESTA Insurance Agent, is negotiating with three insurance companies to provide General Liability and Workers Compensation coverage specifically targeted to ETCP Certified Riggers and those who employ them. The program will be offered to companies specializing in rigging that employ ETCP Certified Riggers and to individual ETCP Certified Riggers that provide rigging services on a freelance basis.

The program will provide broad coverage at reasonable rates from rock solid insurance companies that specialize in entertainment insurance. This program would not have been possible without the introduction of the ETCP rigging credentials.

Companies and individuals applying for coverage must be members in good standing of ESTA. For more information, contact Neil Huff, PRISM, Inc. at 864.801.0460 or by email at neilhuff_prism@esta.org.

Meet two subject matter experts



“If this lighting thing doesn’t work out . . .”

JEANETTE FARMER IS VERY PROUD OF her roots as a native Las Vegas. In 1963 her father Don first came to Las Vegas to work at the Nevada Test Site on the nation’s nuclear program. Soon after, her mother

Virginia (Ginny) followed Don to Sin City. After giving birth to Jeanette and her brother Mark, Ginny entered the field of early childhood education. It was in this environment of Wild West Glitter Gulch, nuclear science, and exposure to the world of education that Jeanette developed her keen desire to entertain, design, and teach.

Through high school theatre classes, Jeanette developed a strong interest in theatrical lighting and set design. Jeanette

attended UNLV under a technical theatre scholarship program while also attending Clark County Community College, taking classes in welding, industrial electricity, electronics, and computer drafting.

After a few years of on-call stagecraft work, small lighting design jobs (*Naughty Ladies Revue* and the *Hot Lips Show*, well, it is Vegas!) and various odd jobs as a construction carpenter, teaching assistant, and (yup, it’s true) a car salesman, Jeanette became one of Andrew Bridge’s lighting design assistant’s working on the ground-breaking production of *Siegfried and Roy at the Mirage*. Through her work at the Mirage she was introduced to a then little-known touring company that needed help setting up their show in a tent behind the hotel. That show was Cirque du Soleil’s *Nouvelle Experience* and Jeanette’s first opportunity to work with talented French Canadian lighting designer, Luc LaFortune.

Jeanette has continued to contribute to Cirque du Soleil’s growing repertoire of permanent shows by providing consultation on the electrical infrastructure and lighting package specifications for Cirque du Soleil’s *Mystère* (opened in 1993), *O* (1998), *Zumanity* (2003), *KÀ* (2005), and *LOVE* (2006). She spent several years at many of these productions honing her skills as lighting director, master electrician, and developer of specialized training programs for her technicians.

Jeanette has volunteered time throughout her career for the education of young theatre technicians through her work with the Thespian Society, Educational Theatre Association, *Lighting Dimensions* Conference Advisory Board, USITT, and as a sponsor for Cirque du Soleil’s newly unveiled college internship program.

Jeanette was honored to be nominated to the ETCP subject matter expert (SME) panel to assist in developing the Entertainment Electrician Certification program. She was thrilled to have an opportunity to collaborate with some of her idols in the lighting industry and is very proud of the final product that the team worked so diligently to create.

When not at work, Jeanette can be found on her boat “Farmer’s Daughter” sailing Lake Mead or at home in her music studio playing guitar and singing with her band. Despite her design and management of several of the largest and most complicated lighting systems in modern theatre, she remains humble and humorous in her self assessment. Jeanette quips “if this lighting thing doesn’t work out, I can always go back to selling cars.” ■

-Nancy Mallette

Imagine the Possibilities

- full color passes for 2 color price
- 2 day turn around
- Numbering on Salins
- Variable Data on Salins



Access Pass&Design
1.800.4.PASSES
www.accesspasses.com

Call now and become a part of the next big thing in Backstage Passes.



Never one to turn down a challenge

ERIC BOUCHARD'S LIGHTING CAREER began accidentally in 1989 when a high school friend asked him to help set up a high profile Halloween party. Starting as a fun way to pay for college, the enter-

tainment industry soon enveloped him. The early nineties were spent on corporate events, permanent installs, and shop work, followed by the co-ownership of a small staffing company named BazSpec. This last project opened the doors to the worlds of the theatre and road houses.

1996 was a big year in Eric's career; he was offered work on the Japanese tour of Cirque du Soleil's *Alegria*. It was here that he realized that he was happier working backstage than actually running a console. The nine month tour taught him a lot about dealing with large scale organizations and working with other cultures. Another great opportunity soon followed—the Montreal company Solotech was looking for a Vari-Lite moving light technician for Celine Dion's *Let's Talk About Love* tour.

When the tour ended January 1, 2000 it was time for a change; Eric retired from show business and went to work for Nortel. It would seem his heart wasn't in it though, and he was soon asking his new boss for days off to go help friends set up shows.

In May of 2001, Cirque du Soleil was just starting production work for *Varekai* and Eric, never one to turn down a challenge or an opportunity to learn new things, signed on as a Set Project Manager. After the show opened Eric took charge of the Cirque Head Office Lighting Department where he has spent the last several years supervising continental transfers and equipment upgrades for the tours. Eric is charged with the Head Office Lighting Department mandate to standardize all of Cirque du Soleil's various touring shows and make certain the shows keep up with the latest technology.

Eric always hoped one day to have the opportunity to give back to the lighting community. This dream came true when Eric was honored to be nominated to participate in the ETCP Entertainment Electrician Certification program as a member of the subject matter expert (SME) panel.

When not on the job, Eric can usually be found renovating his house or playing in the woods with his Land Rover. ■

-David D'Anjou



It's like having one of these for DMX!

DMX Manager Plus!



Merger
Softpatch
Prioritizer

4 user configurable ports
Pathport powered 4-port node
Artnet support
ACN & RDM ready
XLR or terminal connections
ETL listed



www.pathwayconnect.com
403.243.8110