MPS: Please provide a brief description of your professional background and of your role within the Z359.7 subcommittee.

RG: I am president of Sturges Manufacturing Co., an ISO 9001-registered weaver of engineered webbings to customer specifications. In March 2011, the Sturges test lab became accredited to ISO 17025 for testing energy absorbers to the standard, “Personal Energy Absorbers and Energy-Absorbing Lanyards” (ANSI/ASSE Z359.13-2009). During my tenure at Sturges, I have also served as manufacturing engineer and product designer.

I bring a perspective to the committee based on my experience in a company that performs literally thousands of drop tests each year. Also, as a small manufacturer, I recognize the importance of having a number of options to achieve a particular end. In this case, the standard allows testing to be performed by either an internal or an outside lab, and there are three alternatives for the witnessing.

MPS: The new standard, “Qualification and Verification Testing of Fall Protection Products” (ANSI/ASSE Z359.7-2011), was released this summer. What are the major components of the standard, and how does it enhance the other standards included in the Z359 Fall Protection Code?

RG: The standard defines the minimum requirements for the test laboratory, whether that is a third party or the manufacturer’s in-house lab, as well as the unique equipment to properly test fall protection equipment covered by any ANSI/ASSE Z359 standard. It additionally offers three different options for third-party certification.

The Z359.7 is a unifying document that defines the process of witness testing to ensure that any fall protection equipment marked as compliant with ANSI/ASSE Z359 standards was indeed independently tested to the requirements of the appropriate standard and found to be compliant.

MPS: How does the Z359.7 standard define a testing laboratory? What criteria must the testing laboratory meet?

RG: The laboratory must be accredited to ISO 17025, General Requirements for the Competence of Testing and Calibration Laboratories. This ensures that the laboratory has the proper equipment, is staffed with trained personnel and operates under documented procedures that perform testing in compliance with the appropriate Z359 standards.

MPS: What provisions does the Z359.7 standard include to ensure that drop tests are performed safely?

While the standard and ISO 17025 call for technical competency and familiarity with fall protection, safe work procedures are outside the scope of the standard and should be addressed by the organization’s regular safety program.

MPS: The Z359.7 standard states, “The accreditation body shall not have a monetary interest in the profitability of any tested product.” How can this be proven or confirmed?

RG: The standard requires that the lab’s accreditation body be accredited to ISO 17011, General Requirements for Accreditation Bodies Accrediting Conformity Assessment Bodies, and conflicts of interest are addressed in Section 4.3 of that standard.

MPS: What steps should the manufacturer take if testing is to be performed at its own ISO 17025-accredited laboratory?

RG: The nature of dynamic testing using a drop test tower presents a myriad of possibilities for serious
injury to test lab personnel. Falls from the tower, being struck by flying parts and unexpected equipment failures are just a few examples of the potential risks. A comprehensive assessment of the test lab should be undertaken to develop and implement a plan to provide the appropriate safety equipment, operating procedures, training and workplace modifications to minimize possible hazards.

While the lab may be physically part of the manufacturer’s production facility, ISO 17025 requires the lab to operate as an independent organization. To accomplish this, a management philosophy is developed for the test lab quality manual stating that anyone in the test lab must be free from undue pressure or conflicts of interest when performing tests. A conflict of interest statement is also signed by all lab personnel.

**MPS:** If a third-party laboratory representative is used to perform qualification and verification testing of fall protection products, how knowledgeable must this person be about fall protection in general and the tests to be performed?

**RG:** In brief, the standard states that the person shall be knowledgeable and experienced in the tests to be performed, fall protection in general and the test equipment and test structure.

**MPS:** How does the Z359.7 standard define qualified person?

**RG:** A qualified person is one who meets the definition stated in Z359.0 that is “one with a recognized degree or professional certificate and with extensive knowledge, training and experience in the fall protection and rescue field who is capable of designing, analyzing, evaluating and specifying fall protection and rescue systems to the extent required by this standard.”

**MPS:** What happens to products that do not meet the Z359.7 standard’s requirements?

**RG:** This answer has two parts. First, the standard requires the manufacturer to “establish and maintain a Quality Control Management Program, which encompasses the product being tested.” Control of nonconforming material is an essential part of a quality management system to ensure that these products do not inadvertently get in the hands of users. Second, the manufacturer may not label any product as compliant to the ANSI/ASSE Z359 standard unless it met all the requirements of the associated product standard, as well as the Z359.7 standard.

**MPS:** How can manufacturers and testing laboratories best make use of the Z359.7 standard?

**RG:** Embracing the Z359.7 standard provides an opportunity for both manufacturers and labs to examine testing equipment and procedures and to ensure and be able to prove that every aspect of the testing standard is followed exactly as it is intended in the relevant standard.

**MPS:** What are the subcommittee’s long-term expectations for the Z359.7 standard? Are any changes already planned for the next version of the standard?

**RG:** Personally, I believe this is a solid document that will enhance the integrity of fall protection equipment. However, as time goes on and the standard is implemented, there will no doubt be experience-driven suggestions that will further improve how this standard’s intentions can be better accomplished.

Rick Griffith is president of Sturges Manufacturing Co. in Utica, NY. During his tenure at Sturges, he also served as manufacturing engineer and product designer. He holds a B.S. degree in Industrial Distribution from Clarkson University and an M.B.A. from Rensselaer Polytechnic Institute.

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**Machinery Safety Survey**

Discussions of machinery safety often turn to safety control systems (ISO 13849-1 and EN 954-1) and what impact they have on worker safety, injuries and a company’s bottom line. The magnitude of control system failures that cause injuries is not well known. To better understand this issue, please participate in a brief survey. The survey is only 17 questions and takes no more than 10 to 15 minutes to complete.

Survey results will be used to improve industry safety standards.

Any information you provide will be kept strictly confidential. Your information will only be used for this study and resulting write-up on the findings. They will be used for no other purpose whatsoever. You will not be contacted unless you request to be. The study results will be published in a future issue of Safely Made.

If you know others who may be willing to participate in this study, please pass the survey link along. ☝