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The Quarterly Newsletter of the Snell Memorial Foundation

This is the twenty-third of the Foundation's quarterly newsletters to the helmet manufacturing industry. The twenty-second was sent out last February. Comments and items for inclusion in subsequent issues are invited.

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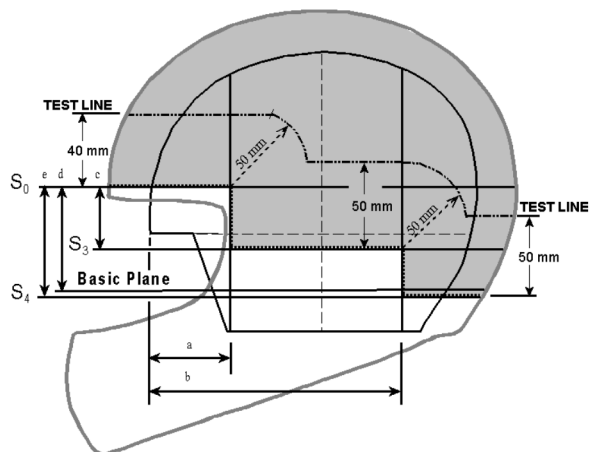
M2000 & SA2000 Drafts

The Foundation's directors have finalized the M2000 and SA2000 Standards. The most significant difference with current requirements is that the M and SA2000 have increased the impact test area. Helmets submitted for the '2000 standards must withstand impacts over an additional one centimeter strip in the brow region of the helmet.

This change in the impact test area, along with the recent standardization of the impact drop

masses to 5.0 kg, means that current Snell test requirements are appreciably more stringent than those when the '95 standards were first introduced. However, these are not sweeping changes. The '2000 standards are part of a procession of small but steady improvements going back to the original Snell helmet standard of 1959. Many of the currently certified '95 helmet models will meet these new requirements already.

For these reasons, owners of recently purchased M-95 and SA-95 certified headgear need not replace them immediately. These helmets should continue to provide their wearers with premium levels of protection for some years to come.



Certification testing to the new standards has already begun. However, M2000 and SA2000 certification labels will not be available until sometime after August of 2000. M2000 and SA2000 certification may not be claimed until the fall of the year 2000 after M2000 and SA2000 labeled helmets are ready for distribution. Helmets meeting the new requirements will be certified to the current '95 Standards until the new Standards take effect.

Once the new labels are available, we will stop shipment of the '95 labels. Manufacturers may continue to use existing stocks of the '95 labels in their Certified helmets until March of 2001. We hope in this way to make the new labels available for the beginning of the production cycle for the 2001 season.



DOT Revision

The "Notice of Proposed Rule Making" introducing revisions to Federal Motor Vehicle Safety Standard 218 is now expected by the fall of this year. FMVSS 218, also known as the DOT motorcycle helmet standard, has set the minimum adequate requirements for US street motorcycle helmets since the early 1970's. Except for a few procedural refinements, this standard is essentially the same as it was when it was first adapted from its ANSI Z90.1-1971 predecessor.

The notice announcing its first real overhaul has been awaited since 1997 and had been expected earlier this spring. When the notice appears in the Federal Register, it will invite comments on the draft rule making from interested parties. These comments will be reviewed and considered in the formulation of a Final Rule which might appear as early as the spring of 2000 and take effect later that year.



Sacramento
Test Labs

Sacramento Test Labs

Manufacturers who require DOT or CPSC type testing but do not wish to participate in Snell Certification programs may soon submit samples for testing to Sacramento Test Labs. These

samples will be tested at the same facility, by the same technicians and with the same rigor as those submitted for Snell certification.

Headgear tested under this rubric will not be subject to random sample testing and, for that reason, will not enjoy either the confidence or the recommendation of the Foundation's board of directors and staff. The Sacramento Test Labs denomination distinguishes between the simple testing service offered here and the complete and rigorous certification programs available from the Foundation.

Sacramento Test Labs will provide a complete and accurate testing service for those manufacturers' products which, for any reason, have been withheld from the Foundation's certification programs. Fee schedules are in preparation. Interested manufacturers are invited to contact this office for further information.

Pretest Information Forms

When submitting helmet samples for testing, it is essential that a properly filled in 'pretest information form' accompany them. The surest way to obtain proper and timely test results is to provide all the necessary information so that the samples can be received, logged, labeled and scheduled.

Blank forms and instructions for filling them out are available. Manufacturers are invited to modify and adapt them as necessary. The only essential is that we have sufficient information to perform and document the requested testing.

In particular, please double check the spelling of the model name, include all the sizes for which the helmet structure is intended, indicate the standard and test type and, finally the disposition of the tested samples. Although we recommend that manufacturers examine all failed samples in order to determine how best to improve their headgear, unless there is a specific request to return failed samples, they are routinely destroyed.

Certification Test Fee Increase

The fees for M and SA type certification testing will increase to US\$940 and US\$1140 respectively as of September 1, 1999. Until then, these fees will remain at their current levels of \$820 and \$875.

Bicycle Helmet Standards

The Consumer Product Safety Commission Bicycle Helmet Safety Standard has been in effect for three months. It requires that all bicycle helmets manufactured after March 10, 1999, and distributed for sale in the United States be certified to CPSC requirements by their US manufacturers or importers. Bicycle helmets manufactured before this date but later than 1994 must still meet the requirements of one of the interim bicycle helmet standards which include ANSI Z90.4-1994, ASTM 1447, Snell B-90, B-95 or N-94, or the CPSC Standard in its final form.

The Foundation modified the B-90, B-95 and N-94 Standards early last year in order to assist manufacturers to demonstrate CPSC performance requirements. Wherever the Snell Standards were demonstrably more demanding than CPSC, the requirements remained the same but in those areas where CPSC exceeded Snell demands or where the comparison was unclear, the revised Snell Standards adopted the CPSC provisions directly.

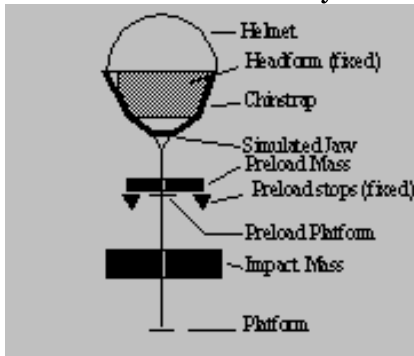
For example, CPSC demands slightly more coverage than Snell B-90 and slightly less than B-95 for persons age 5 and older. B90A, the revised B-90 standard now calls out a test line comparable to CPSC while the B95A and N94A coverages continue unchanged. The CPSC coverage requirements for young children and toddlers exceeded most all previous standards. B90C and

B95C have both adopted the CPSC coverage requirements for persons age 1 and older (extended coverage).

B90A, B90C, B95A, B95C, and N94A have all superseded the previous B-90, B-95 and N-94 Standards as of January 1, 1999.

No further changes are projected for B2000. The B2000 Standard will be identical to B95A while B95C will continue as B2000C. B90A and B90C will continue under their present designations at least until 2003.

Retention Test Analysis



The revisions to the Snell bicycle helmet standards included a change in the retention test procedures. The procedures and equipment used originally were replaced with the equipment and procedures in the CPSC standard in order to resolve any uncertainty over which was the more demanding test. However, we have completed a series of tests on comparable helmets and on a device that simulates the force versus stretch behavior of current bicycle helmets in a reliable and repeatable manner.

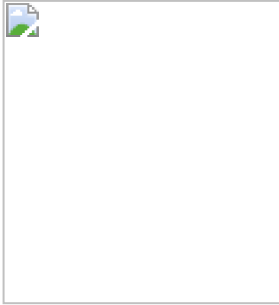
The analysis indicates that the former Snell test subjected the chinstrap, buckle and anchors to consistently higher levels of peak tension but that the CPSC procedure produced greater elongation. These seemingly contradictory observations arise because the Snell procedures draw about 7 mm more slack out of the retention systems before the test is performed. As a result, a retention system may pass the CPSC test and still break under Snell test stresses but it could pass the Snell test and still fail the CPSC stretch criterion. A more complete account is available at the Foundation's website.

DOT (FMVSS 218) Qualification Testing

The American Association for Laboratory Accreditation has audited and accredited the Snell California laboratory's DOT testing capability. The finding means that the lab's DOT testing service meets ISO Guide 25 requirements for quality.

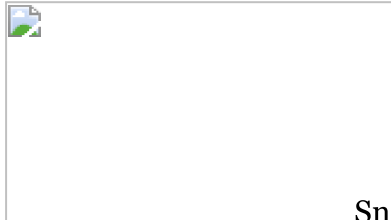
The Foundation does not require DOT compliance for M-95/M2000 certification but, as a service to our clients, we are now able to perform the required testing and maintain the test documentation. Certified manufacturers will not be required to submit for DOT qualification testing. However, manufacturers who wish to, may submit samples of their Snell M-95 certified helmets for qualification to DOT or submit samples for both Snell M-95/M2000 and DOT certification

Snell Web Site



The Snell Foundation World Wide Web Site, <http://www.smf.org>, now includes more than thirty pages of helmet and head protection information. There are descriptions of the Foundation and its certification programs, lists of certified products, the texts of Snell Standards and drafts and links to other web sites of interest.

One of the primary purposes of the site is to acquaint the public with the importance of selecting and wearing the most effective protective headgear. Once the Foundation tests and certifies a helmet, we want people to wear it. If you manufacture or sell Snell certified helmets and you maintain an Internet web site, please contact Mr. Brown to see about establishing a link.



Snell Safety Education Center

The Snell Safety Education Center (SSEC) has taken on all the tasks associated with preparation and distribution of videos, posters, brochures and similar materials promoting the correct selection and use of appropriate protective headgear. These functions have always been seen as a necessary part of the Foundation's overall mission but, in recent years, had created a considerable strain on our structure and resources.

SSEC, by virtue of its flexibility and charter, has the capabilities to perform this function and to cooperate closely with other organizations of similar interests. Currently, the Center is working with the the University of California, Davis, in a program promoting child safety across a broad front in the Sacramento area.

The Center is organized under Federal 501C3 regulations and is separate and distinct from the Foundation. The Center's president, Ms. Hong Zhang, welcomes inquiries and requests for assistance from community and national safety organizations.

Who to Contact at Snell

Snell Memorial Foundation, Inc.

3628 Madison Avenue, Suite 11

North Highlands, CA 95660

Phone: 916-331-5073; Fax: 916-331-0359;

Email: info@smf.org

Internet: Gib Brown gib@smf.org

Testing: Gib Brown gib@smf.org

Decals: Bonnie Adams bonnie@smf.org

Education: Hong Zhang hong@smf.org

Admin: Steve Johnson sdj@smf.org

All Other: Ed Becker ed@smf.org

Editor: Edward Becker, Executive Director

