



### The Quarterly Newsletter of the Snell Memorial Foundation

This is the twentieth of the Foundation's quarterly newsletters to the helmet manufacturing industry. The nineteenth was sent out last April. Comments and items for inclusion in subsequent issues are invited.

#### Karting Helmet Standard

In this issue...		
Karting Helmet Standard . . . . .	1	The Foundation has completed drafting of a new standard describes headgear for use in kart racing.
DOT (FMVSS 218) Qualification Testing . . . . .	1	This K-98 standard includes all the requirements of the SA-95 standard for auto racing helmets except those applying to flame resistance. Headgear currently certified to the Foundation's SA-95 standard meet all the requirements for certification to K-98 and will be added to the lists of K-98 Certified models at the manufacturer's request.
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Who to Contact at Snell . . . . .	4	The K-98 Standard will be available in booklet form shortly and is currently available on the Foundation's Internet web site. K-98 Certification labels are available now to qualified manufacturers at a fee of \$1.00 each. The label color is light blue.

#### DOT (FMVSS 218) Qualification Testing

The Snell California laboratory has just completed installation of equipment and procedures for testing helmets to the requirements of Federal Motor Vehicle Safety Standard 218 (the DOT standard). Motorcycle helmets marketed for street use in the United States must meet these requirements but the responsibility for certifying compliance is left to the manufacturer or US importer.




M-95 certification may not, of itself, guarantee DOT compliance. Technical differences between the M-95 and DOT standards require separate testing to establish compliance with both. If an M-95 certified motorcycle helmet is to be sold for street use in the United States, it is the responsibility of the manufacturer or importer to see that the necessary test documentation is maintained and the necessary labelling is applied.

The Foundation does not require DOT compliance for M-95 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 and DOT certification

This DOT type testing service is only available for headgear in the M-95 certification program. Headgear submitted for both qualifications must first meet the M-95 requirements. Please contact this office for more details.

### Bicycle Helmet Program Restructure

 The Foundation has restructured the B-90, B-95 and N-94 programs. The restructuring results in a marked lowering of the per helmet cost to the manufacturer. It also improves the efficiency of the programs without compromising the significance or the value of Snell Certification.

Another significant feature of the restructuring is that Snell bicycle helmet certification will, of itself, demonstrate that the helmet model also complies with the requirements of the Consumer Product Safety Commission.

This demonstration is enabled by three new documents:

1. 1998 Augmentation to the 1990 Standard for Protective Headgear for Use in Bicycling.
2. 1998 Addendum to the 1995 Standard for Protective Headgear For Use With Bicycles and to the 1994 Standard for Protective Headgear for Use in Non-Motorized Sports.
3. 1998 Addendum to Standards for Protective Headgear For Children Four years of Age and Younger For Use in Bicycling.

These three documents modify and augment the existing Snell Standards as necessary to demonstrate complete compliance with the performance requirements of CFR 16 Part 1203, the CPSC Safety Standard for Bicycle Helmets.

No special testing will be required for B-95 and N-94 certified helmets in current production and marketed for use by "persons age 5 and older." Our random sample testing of these products over the next few months will document CPSC compliance. However, B-90 certified products and all Snell certified bicycle helmets marketed for use by "persons age 1 and older (extended coverage)" will require certification testing if Snell labeled production is to continue beyond December 31, 1998.

It is hoped that lower unit costs for Snell Certification and the elimination of any additional CPSC testing obligation will ease participation in the Foundation's programs and increase the accessibility of protective headgear meeting the Foundation's high standards for protective performance.

Further information on the restructured programs and modified standards is available on the Foundation's web pages <<http://www.smf.org>> or through our California offices.

### Bicycle 'A' and 'C' Testing

Over the next few months, the Foundation's test reports for bicycle helmets may list the Snell standard along with an 'A' or 'C' suffix. The suffix indicates that the standard corresponds to the

CPSC A (persons age five and over) or C (child requirements (persons age one and over - extended coverage).

These suffixes will not be included in the certificates awarded to products passing certification testing. Once the transition to the CPSC compliant B-95, N-94 and B-90 standards is complete, the 'A' suffix will be dropped altogether.

### Certified Products List Restructure

The Foundation's lists of Snell Certified helmet models have traditionally been organized by manufacturer, model and size. Since these lists are distributed to consumers and posted on our web site, we feel that the public and our clients would be better served if the lists were organized by brand name, model and size.

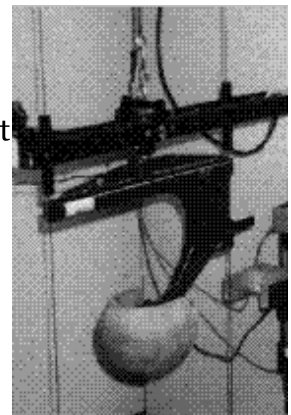
In many cases, the manufacturer name is the brand name. However, oftentimes helmets are made for private labelers or sold under a brand designation other than the manufacturer name. It may be difficult, if not impossible, for someone to locate such a helmet on our lists. We have reorganized our lists to include brand name information. If no brand is indicated, we will use the manufacturer name but, at the manufacturer's request, we will make any appropriate changes.

The certified products lists are among the most frequently visited pages on our web site. I hope that each certified manufacturer will review the lists to ensure that all headgear are fairly and correctly represented. I would be especially grateful for any comments or suggestions for improving these lists.

### Drop Mass Changes

The California lab has just completed all the changes necessary to standardize the drop masses for the ISO A, E, J, M and O headforms. All impact testing to Snell Standards will be at drop masses ranging from 5.00 kg to 5.10 kg.

The ISO O headform, the largest in the size range, presented unique difficulties. In order to meet the drop mass specification, all testing on the O headform will be done on the monorail facility. The ISO A, E, J and M headforms will be done on the twin wire rigs as before.



This mass standardization may cause some helmets to yield higher peak accelerations during impact testing. The change should be inversely proportional to the change in drop mass. Since the increase will never be more than 10%, few currently certified models, if any, will have any difficulty.

### Snell Web Site

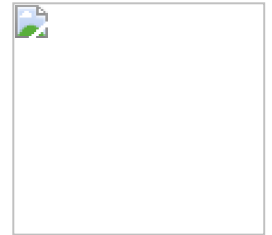
The Snell Foundation World Wide Web site, **www.smf.org**, now includes more than thirty pages of helmet and head protection information. There are descriptions of the Foundation and its certification programs, lists of certified products, links to FTP downloads of Snell Standards and drafts and links 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. We welcome comments and suggestions regarding any aspect of the web site.

## Ski Helmet Standards

The Foundation's directors are considering a second ski helmet standard in addition to the 1998 Standard for Protective Headgear Used in Skiing and Other Winter Activities (S-98). This new standard, still in draft, will apply to recreational snow sports such as skiing and snowboarding and tentatively referred to as RS-98.



RS-98 is similar to S-98 but calls out lower levels of impact. The protection required is still significantly greater than that called out in the Foundation's bicycle helmet standards. Much of the currently available ski headgear will not meet the requirements of the new draft. However, manufacturers of ski helmets are invited to comment on the draft and to submit samples for developmental testing. Please contact the North Highlands office for further information.

### Farewell

Dr. Frank Lin has left the Foundation to work in biomechanical development. All of us here at Snell wish him great success in this new effort.

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