

The Newsletter of the Snell Foundation

| HeadsUp In this issue | |
|----------------------------------|----|
| ECE R 22-06 and M2020R | .1 |
| SA2020 Final | .1 |
| Rotational Testing | .2 |
| Snell Ambassadors Program | .2 |
| Snell Test Methods and Equipment | .2 |
| Fee Increase | .2 |
| Annual Maintenance | .2 |
| Contacting Snell | .2 |

This is the 73^{rd} of the Foundation's newsletters to the helmet manufacturing industry. The 72^{nd} went out last June. Comments and items for inclusion in subsequent issues are invited.

ECE R 22-06 and M2020R

The UNECE, Inland Transport Committee, Working Party on Passive Safety has just proposed a draft revision of Regulation 22. The current version of this regulation, ECE R 22-05, sets protective performance requirements for motorcycle headgear that are deemed legally sufficient for road use in many parts of the world. The new version, ECE R 22-06, will supersede ECE R 22-05 within a few years.

ECE R 22-06 draws on the requirements of a new, racing helmet standard set by the Fédération Internationale de Motocyclisme, (FIM). In effect, ECE R 22-06 folds the FIM demands into the existing R 22-05 standard.

These additional FIM demands will pose problems for many current helmet configurations. As of last September, almost 50% of the ECE R 22-05 qualified helmets submitted for FIM testing failed to satisfy the written test criteria. Helmets certified to other standards such as Snell M2015, FMVSS 218 (DOT) or JIS T8133 may have even greater problems. Snell's directors anticipated this problem when FIM first announced their requirements and formulated M2020R to address it.

M2020R is Snell's best estimate of what might be expected of an optimal helmet for use in FIM events or on roads where ECE regulations apply. Although the M2020R sticker will continue to warn that there are reasonably foreseeable impacts that may exceed the helmet's capability to prevent death or severe injury, M2020R will demand all the impact management capacity reasonably possible consistent with rider needs and ECE R 22-06 demands. It is one of two options included in Snell's current M2020 program. The other, M2020D, accommodates DOT demands rather than those of ECE and FIM.

M2020R is expected to demand helmets of similar weight and bulk to those being built to M2020D and M2015. M2020R requirements are also compatible with those in DOT so that M2020R headgear might reasonably be DOT certified as well as qualified to ECE and FIM. However, M2020R certification does not assure ECE and FIM compliance; helmet makers must also consider the other demands of ECE and FIM when they develop new helmet models.

S nell welcomes questions, comments and advice regarding M2020R.

SA2020 Final

S A2020 was published in its final form in May 2019. SA2020 is more compatible with the requirements of FIA 8859-2015 than SA2015 had been. The impact test requirements are now generally more demanding in terms of either severity or attenuation. The differences with SA2015,

however, are slight. Snell will continue to recommend SA2015 headgear in good condition to drivers and to racing officials and safety inspectors for years to come.

S A2020 and an explanatory cover are available on the Snell website, <u>www.smf.org</u>. Testing has been underway for some time but no SA2020 helmets are to be available for sale or use before October 1, 2020.

Rotational Testing

FIM FRHPhe#01 includes a rotational testing component in which a novel instrumentation package captures the test head form response and stores it for download later, after testing is complete.

ngineers and technicians at the Snell lab have been working with one of these instrumentation packages. The current concerns deal mostly with good lab practice rather than helmet impact performance testing. We're looking to determine whether we can obtain reliable, repeatable results with it and demonstrate its accuracy with quick, efficient confidence checks. Impact severities and injury criteria for helmet testing must still wait on definitive statements from medical and epidemiological experts but once we're confident in these, we hope to be ready to go.

Snell Ambassadors Program

Over 120 motorcycle riders and ridership trainers have become Snell Ambassadors working to promote motorcycle safety and proper helmet use. Ms. Hong Zhang, who supervises Snell's public outreach, recruited the first of these Snell Ambassadors at seminars held by the Motorcycle Safety Foundation, the Gold Wing Riders Association and the State Motorcycle Safety Administrators Association. Hong works closely with these volunteers to get our message out to the public and, just as important, to get their feedback on helmet issues in the field.

Snell Test Methods and Equipment

A n important part of the mission here is showing each helmet maker how to test to Snell standards. We want everyone to know just what their helmets are in for when they submit them to us for testing. In that way they can do the testing themselves, before they submit samples, and maybe spare themselves some disappointment. Even more important, they can run the same tests on production samples and guard against getting an ugly shock in Snell's standards enforcement testing once their helmets are certified.

Helmet makers submitting samples for testing are always welcome to come in and observe. Snell technicians will still give the samples the toughest test permitted in the standard but they'll smile while they do it and conduct a tutorial on the ins and outs of Snell testing. If you're interested, contact Steve Johnson and set up a visit.

Fee Increase

As of January 1, 2020, the fee charged for M2020D and M2020R certification labels was increased to \$1.29 each for one part labels and \$1.34 each for two part. Fees for other Snell labels and for testing remain as they were. The complete fee schedule is available on the Snell website.

Annual Maintenance

The Snell Foundation Laboratory was shut down for annual maintenance and calibration beginning 26 December 2019. We expect to reopen 15 January 2020. Administrative tasks and technical staff will remain available.

Snell Website: www.smf.org

The Snell website has gotten a major overhaul. It is now cell phone friendly as well as with desk and laptops. Microsoft Internet Explorer users may find a few difficulties though.

Please check out some of the new features for certified helmet searches and dealer locations. Dealers and distributors will be added on request. Please let us know what you think.

Contacting Snell

| Snell Foundation, Inc. | | | |
|---|---------------|----------------|--|
| 3628 Madison Avenue, Suite 11 | | | |
| North Highlands, CA 95660 | | | |
| Phone: 916-331-5073; Fax: 916-331-0359; | | | |
| Email: | Office | info@smf.org | |
| Testing: | Steve Johnson | steve@smf.org | |
| Decals: | Bonnie Adams | bonnie@smf.org | |
| Education: | Hong Zhang | hong@smf.org | |
| All Other: | Ed Becker | ed@smf.org | |

Editor: Hong Zhang