

## Committee Seeks Stakeholders to Develop Pile-Yarn Floor Standard

**A** TASK GROUP OF SUBCOMMITTEE D13.21, Pile Floor Coverings, seeks participation from all stakeholders as it finalizes a draft Standard Practice for Operation of a Roller Chair Tester for Secondary Backed Pile Yarn Floor. Stakeholders may comment on the draft, which will be reviewed and balloted by members of the subcommittee which operates in ASTM Committee D13 on Textiles. Nina M. Clarke, Technical and Flooring Division, DuPont Canada, Inc., Kingston, Ontario, Canada, is subcommittee chairman.

Technical service specialist David Wilkinson, Emulsion Polymers Carpet Group, The Dow Chemical Company, Dalton, Ga., explains why the proposed standard practice supports carpet quality. "This equipment allows the user to perform a durability test of carpet (pile yarn floor covering) under conditions that simulate the wear of a 200 lb. person in a rotating castor chair," says



Roller Caster Chair

PHOTO COURTESY OF THE DOW CHEMICAL COMPANY

Wilkinson. "In many offices where carpet has been installed, the first signs of delamination of the secondary backing occurs at the desks under the rolling chairs. This type of roller-chair tester has been used for many years to help the carpet industry develop better carpet backing systems that will be more durable to heavy roller wear. There have been several types of equipment designs, and this practice references the design that has proven to be most reliable and efficient."

The subcommittee initiated the new standard because most carpet testing is performed on the newly-manufactured product, says Wilkinson, the ASTM task group chairman. "There are three other practices for equipment that are used to test the durability of carpet (Vetterman Drum, Hexapod Tester, and the Tetrapod Tester)," he notes. "This practice [will] offer the carpet manufacturers another option for measuring durability based on a different type of fatiguing mechanism (rotating and twisting wheels versus pounding bumpers)."

According to Wilkinson, users of

the standard will gain a protocol for using the roller-chair tester for carpet testing. "From this practice, the user can develop standards of performance," he says. "It can be used to assess the performance of the yarn, construction, secondary backing, or underlayment cushion. We hope that some users will specify a certain performance of a carpet system based on the use of this practice. For instance that the carpet, when testing according to the practice using a specified underlayment cushion, will withstand 10,000 cycles on the test equipment without evidence of delamination of the secondary backing."

For further technical information, contact David Wilkinson, Emulsion Polymers Carpet Group, The Dow Chemical Company, Dalton, Ga. (phone: 706/277-8143; [dwilkinson@dow.com](mailto:dwilkinson@dow.com)). ASTM Committee D13 on Textiles meets March 16-19 in Kansas City, Mo. For meeting or membership details, contact Maxine Topping, manager, Technical Committee Operations, ASTM International (phone: 610/832-9737; [mtopping@astm.org](mailto:mtopping@astm.org)), or visit [www.astm.org/COMMIT/D13.htm](http://www.astm.org/COMMIT/D13.htm). //

## Call for Stakeholders to Develop Hydroburst Test Method

**A**STM SUBCOMMITTEE D30.04, LAMINA AND LAMINATE TEST Methods, seeks users, testers, and producers of composites and filament-wound composites to participate in a round robin or provide technical comments on a draft Standard Hydroburst Test Method applicable to composite overwrapped pressure vessels, rocket motor casings, flywheels and other filament-wound composite structures.

A subcommittee task force invites individuals to develop the standard with representatives from NASA, the University of Texas Center for Electromechanics, University of San Diego, and two aerospace companies.

Task force chairman Kevin Konno says the test method under development will be an improvement over the flat coupon split-D and NOL ring test methods. "It will help developers characterize true static and fatigue hoop properties of a filament wound structure which is crucial if you are building a structure which has significant loads or cycles," says Konno, mechanical

At left is a typical filament-wound composite flywheel rotor. At right is a wound hydroburst ring.



PHOTO COURTESY OF NASA

engineer, NASA Glenn Research Center, Cleveland, Ohio.

Subcommittee chairman Peter Grant, is an aerospace-structures engineer currently leading the development of composite allowables for Boeing Commercial Aircraft, Seattle, Wash. Grant and other subcommittee members will review and ballot the final draft standard.

To participate in this activity, contact Kevin Konno, NASA Glenn Research Center, Cleveland, Ohio (phone: 216/433-8373; [kevin.e.konno@grc.nasa.gov](mailto:kevin.e.konno@grc.nasa.gov)). Committee D30 meets March 17-20 in Kansas City, Mo. For membership or meeting details, contact Jim Olshefsky, director, Committee Services, ASTM International (phone: 610/832-9714; [jolshefs@astm.org](mailto:jolshefs@astm.org)). //