

1-8-2009

## 'HowStuffWorks': UDRI's Aluminum Innovation

Follow this and additional works at: [https://ecommons.udayton.edu/news\\_rls](https://ecommons.udayton.edu/news_rls)

---

### Recommended Citation

"'HowStuffWorks': UDRI's Aluminum Innovation" (2009). *News Releases*. 1617.  
[https://ecommons.udayton.edu/news\\_rls/1617](https://ecommons.udayton.edu/news_rls/1617)

This News Article is brought to you for free and open access by the Marketing and Communications at eCommons. It has been accepted for inclusion in News Releases by an authorized administrator of eCommons. For more information, please contact [frice1@udayton.edu](mailto:frice1@udayton.edu), [mschlangen1@udayton.edu](mailto:mschlangen1@udayton.edu).

# University of Dayton, Ohio (url: <http://www.udayton.edu/index.php>)



## 'HowStuffWorks': UDRI's Aluminum Innovation

01.08.2009 | Faculty, Research

Tonight on a hot new Discovery Channel show called HowStuffWorks, a University of Dayton scientist demonstrates how to stop a bullet.

During the episode, dedicated to the many uses of aluminum, UD Research Institute physicist Ron Hoffman fires .50-caliber, armor-piercing bullets into a patented transparent ceramic material, strengthened with aluminum oxynitride, to show how much more effective it is than previous generations of bulletproof glass. Hoffman and his colleagues in UDRI's impact physics

group helped develop the material, called ALON, for the Burlington, Mass., materials engineering company Surmet. Using aluminum not only added strength, but also cut weight.

"Bulletproof glass, often used in military or other vehicles used to transport troops and VIPs, is extremely heavy," Hoffman said. "Cutting the thickness — and therefore weight — without reducing strength has obvious advantages."

The one-hour show airs at 8 p.m. and midnight today — Thursday, Jan. 8 — on Discovery.

Pamela Gregg, UDRI's communication administrator, said UDRI was not provided with the episode in advance of its premiere, so she called to ask if UDRI's segment made the cut.

She wasn't disappointed: UDRI's footage is "the coolest part of the segment," the producer told her.

Jupiter Productions produces the show, which launched in November. The television show grew out of the popular Web site [howstuffworks.com](http://howstuffworks.com). More information about the show is available at the Discovery Channel link.

***For more information, contact Pamela Gregg, University of Dayton Research Institute communication administrator, 937-229-3268 or [Pamela.Gregg@udri.udayton.edu](mailto:Pamela.Gregg@udri.udayton.edu).***