



Calhoun: The NPS Institutional Archive
DSpace Repository

News Center

News Articles Collection

2009-12

Mackin Provided Engineering Expertise to Television Series

Center for Homeland Defense and Security

Naval Postgraduate School, Monterey, California

<https://hdl.handle.net/10945/51107>

This publication is a work of the U.S. Government as defined in Title 17, United States Code, Section 101. Copyright protection is not available for this work in the United States.

Downloaded from NPS Archive: Calhoun



Calhoun is the Naval Postgraduate School's public access digital repository for research materials and institutional publications created by the NPS community. Calhoun is named for Professor of Mathematics Guy K. Calhoun, NPS's first appointed -- and published -- scholarly author.

Dudley Knox Library / Naval Postgraduate School
411 Dyer Road / 1 University Circle
Monterey, California USA 93943

<http://www.nps.edu/library>

Mackin Provided Engineering Expertise to Television Series

 chds.us/c/item/606

Tom Mackin has a knack for explaining complex engineering concepts to decidedly non-engineering type people.

So when a query was e-mailed to engineering professors around the country by a production company seeking someone adept at translating tech-talk into television talk, Mackin, a professor at the Center for Homeland Defense and Security (CHDS) and Cal-Poly in San Luis Obispo, Calif., responded promptly, thinking it sounded like fun.

Within days, Mackin had a new part-time job on the (sort of) reality television series "The Colony," on the cable network The Discovery Channel. The first season completed airing in October and the show is now in reruns. Mackin said production of a second season is beginning.



Mackin was interviewed and hired by Original Productions, whose resume includes the well-known shows "The Deadliest Catch" and "Ice Road Truckers."

"The Colony" puts 10 volunteers with diverse areas of expertise in a mock post-disaster world, actually a warehouse in Los Angeles, where a fictional catastrophic event forces them to survive without necessities and modern comforts until they can rebuild some sort of society.

"They had to figure out how to get water, how to generate power, build a water filtration system – how to rebuild a civil society," Mackin said.

Mackin's role was a bit less taxing than that of the participants. As viewers watch, academic experts pontificate on the psychological, security and, in Mackin's case, the engineering concepts behind the contestants' rebuilding task of each particular episode, what producers call "insertion points."

"I was a talking head," Mackin said with a laugh while taking a break from teaching Critical Infrastructure Protection at CHDS.

So, as the post-apocalyptic refugees were building water filtering systems, constructing a make-shift power grid, girding their defenses or assembling some communication devices, Mackin was the pundit who explained the engineering principles that were guiding their production.

That may be an easy task when lecturing engineering students or even somewhat effortless when teaching the quality of students at CHDS, but verbalizing a brief engineering explanation for dummies on the tube proved challenging.

"Trying to explain how (Nikola) Tesla's coil works, some of the stuff was extremely difficult to explain," Mackin said, referring to the late inventor and engineer's device that created electrical fields. "You can't be overly technical. You're talking to a general audience."

Having the experience of explaining critical infrastructure protection at CHDS to students who, while intelligent, aren't all professional engineers helped prepare him to simplify complexities for the television viewer.

In turn, his experience in working with CHDS students helped him better understand certain aspects of the show.

"Working here helps me understand the response and recovery aspect, which is something I have learned from students," Mackin said.

Moreover, he said at times he was able to draw upon the expertise of his students.

"I think that helps me do a better job at the Discovery Channel," he said.

He said he was particularly impressed by the show's staff and creativity. Some production workers toil around the clock. Mackin himself spent hours watching tape, though his actual face time was typically whittled down to about 15 seconds, he said.

"It was fun," he added. "It was impressive to see how creative they can be and how hard they work."

[Copyright/Accessibility/Section 508](#)