



Current Initiatives

Fort Meade High School

A local high school's
Homeland Security
program utilizes
REGAL software,
conducts their own
data collection and
has presented their
findings to the Anne
Arundel County
Security Council.

(Continued on page 3)

Spotlight in *Security Management*, September 2009

Article by: Joseph Straw

Getting people out of a building quickly and safely in an emergency is a top concern of crisis managers. Two new tools may help them achieve that goal.

One is a computer simulation software program that tries to factor in how people react in evacuation situations. It is intended to help emergency preparedness teams spot critical problems that might not show up in everyday drills.

The software, called the Evacuation Planning Tool (EPT), was developed by Linthicum, Maryland's Regal Decision Systems for the U.S. Department of Homeland Security (DHS) in collaboration with the Department of Defense's Combating Terrorism Technical Support Office.

The program is built around a facility schematic provided by the client. The viewer sees a display that represents the facility in three dimensions; the simulation can show whatever a client chooses.

Because accurate recreation of evacuation conditions in a drill is impossible, the simulations can help highlight unseen problems. After running simulations,

clients might reposition furniture near an exit or divide up emergency supplies to prevent a mob from forming around a single location.

The "behaviors" programmed into evacuation simulations are based on anecdotal evidence drawn from case-by-case observation. One observation is that when evacuees start to bunch up at a doorway, if one person peels off from the group, others will assume that individual is aware of a faster alternative exit and will follow.

That phenomenon was programmed into EPT and was later observed in evacuations of federal buildings during an accidental violation of restricted airspace over Washington, D.C. last April.

Regal Decision Systems is also working on a second tool, the Regal Evacuation Guidance System (Regal EGS), that may help in evacuations by providing active sensing of threats, coupled with real-time communication that guides evacuees via centrally controlled, color-coded strip lighting on the floors and walls of corridors. The company has worked on one such system intended for the Pentagon.

[Click here to view the full article or visit SecurityManagement.com](#)



Innovative Communication Technologies

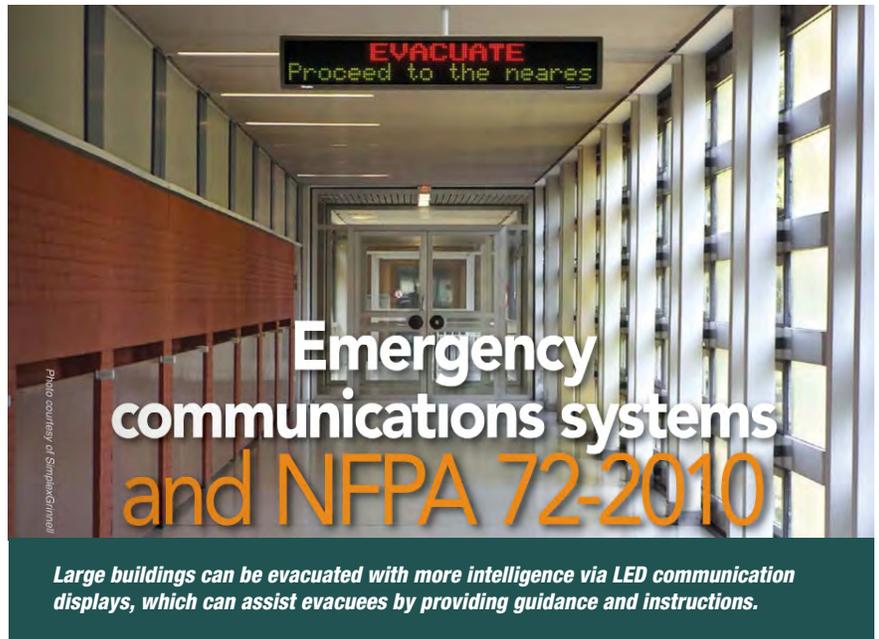
REGAL – Security and Consulting

Article by: Andrew Woodward, PE, Arup, Cambridge, Mass.; and ray Grill, PE, FSFPE, Arup, Washington D.C.

As REGAL continues to broaden their horizons, new laws are being passed and implemented into daily routines. A recent article from Consulting - Specifying Engineer Magazine, explains how the National Fire Protection Agency (NFPA) has added several new laws which will be displayed in the 2010 edition.

The title of the magazine article is “Changing mass notification systems to emergency communications systems, and three new chapters signal big changes to NFPA 72”. As quoted from the magazine, “The 2010 edition of NFPA 72 will have undergone significant changes from the 2007 edition, including the addition of three new chapters and a name change to National Fire Alarm and Signaling Code. One of the most significant changes is the incorporation of design, installation, and testing requirements for mass notification systems into the body of the code. These requirements will be in a new chapter called Emergency Communications Systems (ECS)”.

As vulnerability studies and risk analyses are conducted, REGAL continues to highlight the all important detail of communication. The topic of communication also revolves around the use of mass notification systems, and with recent campus crimes forcing the implementation of these systems, one can't place a price tag on their value. As also mentioned in this article, one of the new laws will include a “Systems in Building” notification system. As quoted, “The In-Building Mass Notification Systems section provides requirements for a stand-alone mass notification system or one



combined with the fire alarm system. Mass notification systems provide prerecorded voice messages for specific events or live voice messages from a centralized location or specific to the building. When a visual notification appliance is used solely for mass notification, it must be amber in color. If the visual notification appliance serves multiple purposes, the color must be coordinated with the facilities emergency plan.”

REGAL understands the importance of communication and mass notification systems, however several other factors must also come into play. After a Risk Analysis is completed, a Volume Assessment would then be conducted, a study of the Ingress & Egress Patterns would take place, the Contraflow and Placement of Resources would be explored, and finally a Road Network Analysis would also be conducted. As new products and ideas are introduced into the market place and our society has the desire to create a safer environment, REGAL will continue to be at the forefront of implementation as well as bringing a heightened awareness to emergency planning.

[Click here to view the full article or visit](#)
Nextbook.com

Seize the Power of Simulation Technology

REGAL Software Goes to School

Ft. Meade High Students Present Their Findings

As previously mentioned in our last newsletter, REGAL is proud to announce the continued success and growth of the Meade High Homeland Security Program. What started out as a small role as a co-curricular team member has now developed into much more. The students have given a presentation to the Board of Education which has now led to a second demonstration in front of the Anne Arundel County Security Council.

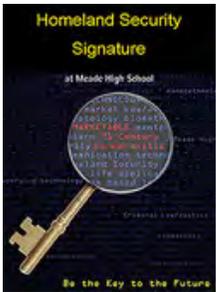
Just before summer, the involvement with the 9th grade class continued to expand when the entire class incorporated REGAL software into their own curriculum. On three different occasions, three separate class periods each collected data and calculated an average population which included not only the number of faculty, but students as well who were present on that particular day. The students also observed to see if emergency exits were accessible, evacuation routes were posted, and to see if the student body actually knew what to do or where to go if an evacuation was to take place. As the students reviewed and compiled their data, they then came up with ideas and solutions which included communication, utilization of smart technology, warning lights in

the classrooms with different colors for different situations, synchronized routes, and final destination areas to meet.

As the importance of the situation grew, four students from three separate class periods presented their findings to the Anne Arundel County Board of education on June 9th, 2009. The students included the culmination of their data and captivated the audience which not only included faculty, staff, and members of the Board of Education, but also representatives from Congressmen Dutch Ruppersberger's office. The Meade High students brought their ideas together and created recommendations based on their findings using the EPT program. They also

strongly urged that with next year's class doubling in size, changes had to be put in place and they wanted to be responsible for implementing them.

REGAL is pleased to announce that the students have rose to the challenge yet again and on September 24th 2009, they presented their findings to the Anne Arundel County Security Council. Also, on November 4th 2009, REGAL will take part in a television interview on "Business Goes to School".



Click to visit Meade High's Homeland Security website.



Ft. Meade High School as it appears in REGAL's EPT software.



Students used REGAL software to analyze their school's evacuation plan, then presented that information to the Board of Education.

people & profiles

REGAL at the Forefront

REGAL opens new White Marsh office



The newly opened White Marsh office is located just minutes of I-95 near The Avenue and White Marsh Mall in White Marsh, MD.

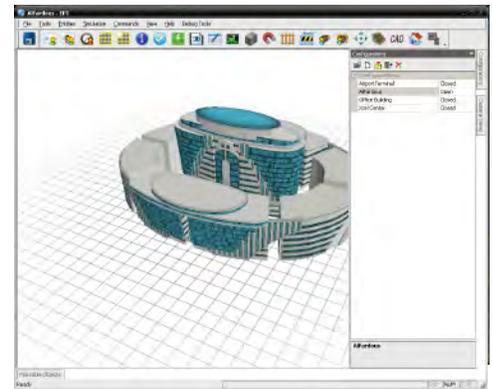
As REGAL expands its services and continues to grow from within, so must their surroundings. REGAL is happy to announce that they have moved into a new office which is

centrally located in White Marsh, Maryland.

The new location, 8015 Corporate Drive, Suite K, completed construction and has been up and running since mid-August. The new design of their office will showcase REGAL's new smart technology. Phase I of our newly developed security division will include the ability to recognize biometrics such as an employee's fingerprints. Phase II will also plan to utilize smart cameras that have the capability to not only record video and voice, but also take a picture and send it to a cell phone if someone is in the building after the hours of operation. By incorporating these sophisticated items, REGAL's clients will be able to see first hand new cutting edge software and tools. Please feel free to visit REGAL's exciting new expansion and experience several new changes taking place.

Also In The Spotlight

REGAL has been working with e-IDC & L3 communications to install the Emergency Response Information System (ERIS) in the Al Fardous complex in Qatar. ERIS uses a GIS map interface along with a 3D viewer to provide additional building information to first responders and emergency personnel.



ERIS 3D Viewer

As REGAL continues to move forward and actively work with government agencies using the Evacuation Planning Tool, new additions are currently in the process of being developed. REGAL is in the beginning stages of constructing and incorporating road networks along with plume dispersion models into the EPT software.

For more information, please contact Brian Schaedel, at bschaedel@regaldecision.com, or visit our website at www.regaldecision.com.



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Seize the Power of Simulation Technology