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FIRE COMMISSIONER SCOPPETTA AND POLYTECHNIC UNIVERSITY PRESIDENT EMERITUS GEORGE BUGLIARELLO ANNOUNCE \$1 MILLION GRANT TO STUDY EFFECTS OF WIND-DRIVEN HIGH-RISE FIRES

Study Will Greatly Improve Safety for New Yorkers and FDNY Members

Fire Commissioner Nicholas Scoppetta and Polytechnic University President Emeritus George Bugliarello joined representatives from the National Institute of Standards and Technology (NIST) and the Federal Emergency Management Agency (FEMA) today to announce a \$1 million grant to study the effects of wind-driven high-rise fires. Fire officials will conduct a series of controlled burn experiments that will test three different techniques to fight high-rise fires under wind-driven conditions. These tests will give the FDNY a better understanding of how to control the flow of fire and smoke while operating at a high-rise fire.

Funded through a FEMA Assistance to Firefighters Grant for Research, the study partners the FDNY with Polytechnic University and NIST to evaluate the effects of a fire in a seven-story abandoned building on Governors Island -- similar to hundreds of buildings throughout the City. The testing will improve the overall safety of the public and FDNY firefighters by exploring ways to control the movement of intense heat and smoke created by a wind-driven fire. The \$1 million grant will allow for additional testing and research to be conducted over the next three years.

“Firefighters risk their lives to protect New Yorkers every day, and this study will further enhance their skills to accomplish that mission,” said Commissioner Scoppetta. “A fire in a high-rise building presents one of the most dangerous environments a firefighter can face. Experimenting with new techniques is the best way to combat such extreme conditions.”

One of the strategies being tested is Positive Pressure Ventilation (PPV), a technique where fans are used to pressurize specific zones in a building to drive smoke and heat away from stairways and corridors. This will allow for a safer environment for both firefighters and occupants of the building.

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Another strategy is the use of a fire-resistant window blanket. The blanket is lowered from the roof or the floor above the fire and works to stop the flow of wind into the apartment, cutting off the fire's oxygen supply. The blanket, which is 10 feet long and 12 feet wide, is able to withstand direct exposure to 1,500 degrees for an unlimited amount of time and 2,000 degrees for up to 15 minutes.

The third strategy is a specially designed nozzle referred to as a High-Rise Nozzle. This tool is positioned from a window directly below the window of the floor into which the wind is blowing. The tip of the nozzle is then hung over the windowsill where the fire is located. The research being conducted will determine the type of water stream and quantity of water required to effectively control or extinguish these types of fires.

Representatives from major fire departments across North America will attend the week-long series of burn experiments, including the Chicago Fire Department, LA County Fire Department, the Boston Fire Department, the Denver Fire Department, the Boise Fire Department, Washington D.C. Fire Department, the Ottawa Fire Service and many other departments.