Natural Hazards Engineering Research Infrastructure **(NHERI)**

NHERI provides a network of shared, state-of-the-art research facilities and tools at universities around the country to help us better understand and resist the impacts of wind, water and earthquake hazards.

Natural Hazards Engineering Research Infrastructure (NHERI)

Thank you for your kind invitation to serve as a keynote speaker at the 2017 Engineering Deans Institute conference in Coral Gables, Florida.

While I am deeply honored by your request, I regret that I cannot attend. I applaud your commitment to providing opportunities for Engineering Deans to discuss their critical work. I am also pleased that you are including a session on the importance of Natural Hazards Engineering Research Infrastructure facilities supported by the National Science Foundation. As you know, this type of research is critical to our national security, and I am honored that the committee chose to highlight this important topic at your event.

Thank you again for your thoughtful invitation.

Best wishes for a successful meeting.

Sincerely,

France A. Córdova
Director

NHERI

7 facilities, 1 Rapid response, 1 coordinating center, 1 computational modeling

Lehigh University

Advanced Technology for Large Structural Systems (ATLSS) Engineering Research Center

University of Texas at Austin

Experimental equipment site specializing in dynamic in-situ testing using large-scale mobile shakers

University of California, Davis

Center for Geotechnical Modeling (CGM)

University of Florida

The Powell Laboratory: Terraformer Wind Tunnel and full-scale destructive testing for extreme wind events

Florida International University

Wall of Wind International Hurricane Research Center

University of California, San Diego

Large High Performance Outdoor Shake Table (LHPOST)

Oregon State University

O.H. Hinsdale Wave Research Laboratory

University of Washington

Explore the post-disaster Rapid Response Research Experimental Facility.

due Unvieristy

FIU | Wall of Wind
NHERI Experimental Facility

NSF NHERI Wall of Wind Experimental Facility

To enable frontier research and education to impart resiliency and sustainability to new and existing buildings, cladding systems, and lifeline infrastructure, to prevent wind hazards from becoming community disasters.

NHERI WOW EF: Facility

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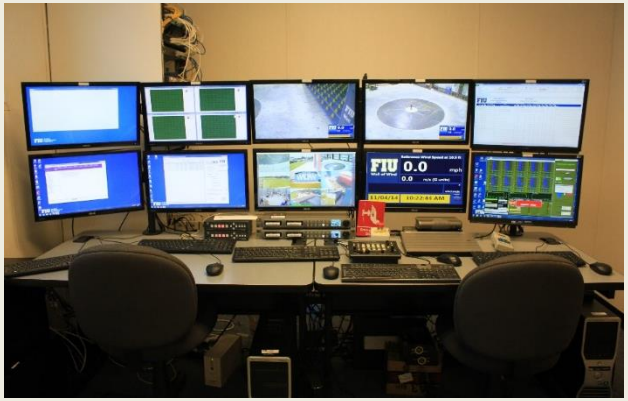
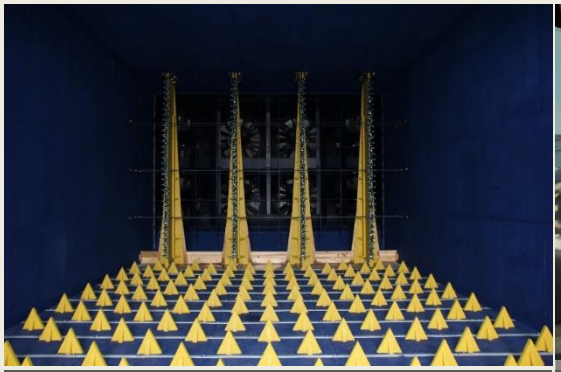
Building and Operations and Control Center



Control Room



Flow Management and Rain Nozzles

WOW Turntable (16 ft. Diameter)

Staging Area

NHERI WOW EF: Key Strengths

FIU Wall of Wind
NHERI Experimental Facility

Unique Experimental Resources and Testing Capabilities

- Up to Category 5 hurricane winds simulations
- Multi-Scale Testing (full-, large-, small-scale)
- Destructive Testing (to predict progressive failures in buildings and infrastructure elements)
- Wind-Driven Rain simulations (to study water intrusion)
- Testing of Various Structures (buildings, bridges, renewable energy systems, lifeline infrastructures

User Support

FIU Wall of Wind
NHERI Experimental Facility

1. Assistance to potential Users during NSF proposals development

   (design of experiments; budget assessment)

2. Travel funds for attending WOW EF User Workshop

3. 'Testing Enhancement Program,' for users who did not include WOW EF in their original NSF proposals but are interested in validating numerical studies, CFD simulations, and FEM modeling techniques

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2017 NSF NHERI Wall of Wind Experimental Facility User Workshop

- **June 15 and 16, 2017**
- **Participants requesting travel funds will be reimbursed for actual expenses up to a maximum of $600 per participant.**

Interested Users Should Register At:

https://www.designsafe-ci.org/learning-center/workshop-170615/