

Civil and Environmental Engineering Seminar

The Astani Department of Civil and Environmental Engineering presents



Honorable Robert L. Sumwalt
Former Chairman
National Transportation Safety Board

Date: Thursday, November 11, 2021

Time: 11:00am-12:00pm

Zoom Meeting:

<https://usc.zoom.us/j/99680049945>

Meeting ID: 996 8004 9945

Passcode: 905716

From Design to Disaster

Abstract:

The engineering profession plays a vital role in ensuring the safety of our Nation's infrastructure. Now that Congress has passed a landmark infrastructure bill, the engineering responsibility for ensuring safety will become leveraged even more.

In March 2018, a pedestrian bridge under construction at Florida International University (FIU) in Miami, Florida, collapsed, claiming six lives. Despite evidence of severe cracking, the engineer-of-record (EOR) insisted that the cracking did not pose a safety problem. The EOR was so confident of his design calculations and so persuasive during a meeting the morning of the collapse, that no one pushed to stop work or close the highway below.

This presentation will discuss the engineering errors and failures that led to this tragedy, and will discuss ways to prevent such disasters in the future.

Bio:

Robert L. Sumwalt served as Board Member of the National Transportation Safety Board (NTSB) from 2006 to 2021. Appointed by President George W. Bush in 2006, Sumwalt was later reappointed by Presidents Barack Obama and Donald Trump. In 2017, Sumwalt was nominated by President Trump and confirmed by the US Senate to serve as the 14th Chairman of the NTSB – a position he held for four years.

Robert is well-known to be a fierce advocate for improving safety in all modes of transportation, including teen driver safety, impaired driving, distractions in transportation, and several aviation, rail and pipeline safety initiatives.

Before joining the NTSB, Mr. Sumwalt was a pilot for 32 years, including 24 years with Piedmont Airlines and US Airways. He accumulated over 14,000 flight hours. He also spent eight years as a consultant to NASA's Aviation Safety Reporting System (ASRS) and has written extensively on aviation safety matters. He has co-authored a book on aircraft accidents and has published more than 100 articles on transportation safety and aircraft accident investigation.

Sumwalt earned an undergraduate degree from the University of South Carolina and a Master of Aeronautical Science (with Distinction) from Embry-Riddle Aeronautical University, with concentrations in aviation/aerospace safety systems and human factors aviation systems.

In recognition of his accomplishments, he was awarded an honorary Doctor of Science degree from the University of South Carolina, and an honorary Doctorate from Embry-Riddle. He is the recipient of the Flight Safety Foundation Laura Taber Barbour Air Safety Award and the Flight Safety Foundation – Boeing Aviation Safety Lifetime Achievement Award. He is an inductee into the South Carolina Aviation Hall of Fame.

He currently serves transportation safety analyst for CBS News. In January 2022, Sumwalt will join Embry-Riddle Aeronautical University as Distinguished Fellow in Aviation Safety and Executive Director of Embry-Riddle's Center for Aviation and Aerospace Safety.