

All members, families and friends of Polish-American Engineers Association are cordially invited to attend our March 2008 meeting.

DATE: **Friday, March 14, 2008**

TIME: 7:30 – 8:00 pm Social Time
8:00 pm – Business and Technical Session

PLACE: **Copernicus Center**
5216 West Lawrence Ave.
Chicago, Illinois

SPEAKER: **Walter Rymysza, PE,**
Vice President
Bowman, Barrett and Associates

TOPIC: **San Francisco-Oakland
BAY BRIDGE
Seismic Safety Projects**

Completed in 1936, the **Bay Bridge** was the most expensive bridge of its time. End to end, it spanned over eight miles – crossing the deep shipping channels near San Francisco, tunneling through Yerba Buena Island, and crossing over the mudflats near Oakland. Its foundations extended several hundred feet down through bay water and sediment with the deepest pier in the world. The Bay Bridge needed to span great distances and withstand high winds, damp salt air and swift tides. Although it was built near two major fault lines, at the time the extent of the earthquake threat to the bridge was not fully recognized, as it is today. The Bay Bridge was designed (Ralph Modjeski played a major role there) as several distinct structures – a West Span composed of two suspension spans laid end-to-end, with a central anchorage between San Francisco and Yerba Buena Island. The world’s largest- diameter-bore tunnel passes through the island and connects to the East Span, a cantilever-truss structure (Modjeski’s signature design) that crosses the bay before touching down near Oakland. When the bridge was built, Modjeski’s cantilever section was the largest of its kind in the United States.

Tragedy struck on October 17, 1989 when the 7.1-magnitude Loma Prieta earthquake caused a 50-foot section of the East Span’s upper deck to collapse. The bridge – a lifeline structure for the entire Bay Area – was closed for a month as emergency repair work was performed. A comprehensive study of the Bay Bridge following the quake concluded that the West Span could be seismically reinforced (retrofit), while the East Span would need to be entirely rebuilt.

The presentation will particularly address the construction of the new East Span, which features the world’s largest single-tower Self-Anchored Suspension (SAS) span. It is scheduled to be completed in 2013 for a cost of \$1.43 billion. The presentation will

also cover the new 1.2-mile-long elevated Skyway which was completed on schedule in December 2007 for a cost of \$1 billion.

Walter Rymysza, PE, is a Vice President of Bowman, Barrett and Associates and a Project Manager at BB&A. He completed his studies at the Department of Civil Engineering of Warsaw Polytechnic in 1976 and obtained his MSCE in 1978. As a student he worked with leading Polish architects on many national and international design competitions – 1st place for Municipal Railway/Bus Terminal in Lublin (1973), 3rd place for Vienna City Hall (1974), 1st place for Funchal Resort on Madeira Island (1975). Before joining Bowman, Barrett and Associates in 1990, he worked at Benesch & Company for five years. The railroad bridge over Marshall Avenue and Snelling Street in St. Paul, MN for Minn. DOT, which he designed with his boss, John Barrett while at Benesch, won First Prize Award from American Institute of Steel Construction (AISC) in 1990. Mr. Rymysza specializes in railroad bridges and has designed a variety of structures throughout his career. He has been a member of PAEA since 1983.

Audit Committee completed its review of the financial statements for 2006-2007 period and will present its finding during March meeting.

We received an invitation and pending approval by members will participate in the **May 3rd Parade** on Columbus Drive.

Ralph Modjeski Scholarship will be awarded is September 2008. We will start to collect applications from qualified engineering students. Please disseminate this information within Polish community

Special thanks and acknowledgement to **Mr. Kazimierz Florek** for sharing with us his vision of particle physics, antimatter and cosmology. His book titled “Antymateria” which he distributed during the January and February meeting provides an interesting take on the subject of UFO’s and all phenomena associated with antimatter and antigravity.

A business meeting will precede the technical presentation. Coffee and pastries will be served during the intermission.

SPECIAL INVITATION for Polish engineers and technicians who recently came to Chicago.