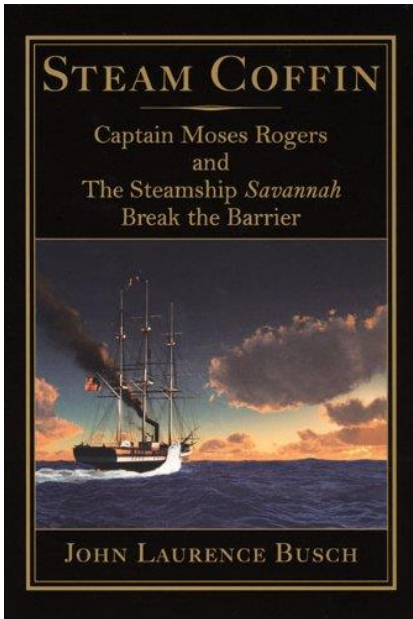




Captain Moses Rogers
Steamship Savannah - 1819



"Nearly three in four Americans remain afraid of self-driving vehicles," Forbes Magazine, 2019



Breaking Through Barriers to Achieve Revolutionary Innovation: Steam Coffin (1819) Autonomous Car Coffin (2019)

John Laurence Busch

*Rhyming High Tech – Introducing Steamships
versus Autonomous Vehicles, 200 Years Apart*



**Register
to Attend**

Dinner Tickets:

- \$25 – Members
- \$30 – Supporters
- \$35 – Affiliates
- \$45 – Non-member
- \$20 – Students
- \$15 – Student Mem.

Dinner and Presentation

5:30 PM – 8:30 PM

Tuesday, November 19, 2019

Grand Trunk Whisky Parlor (upstairs)

612 Woodward Ave, Detroit, MI

Visit: www.incose.org/michigan

Tour:

4:00-5:00 PM

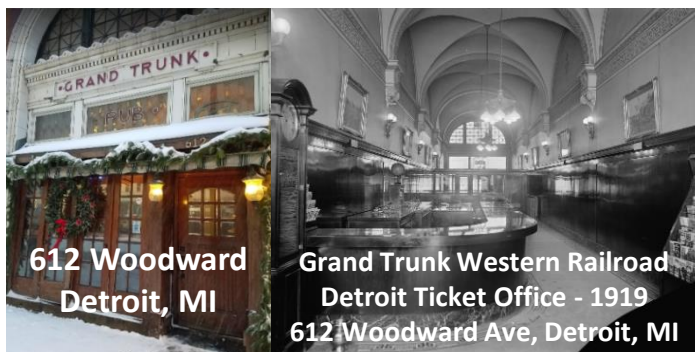
**Detroit
Thermal**

(see Page 3 for
details)

Tickets:

\$5, \$10, \$15

The Historic Grand Trunk Pub – 1919 and 2019



Dinner Speaker and Topic:

Rhyming High Tech

Introducing Steamships versus Autonomous Vehicles, 200 Years Apart

by

John Laurence Busch

At the beginning of the 19th century, the human race remained—practically speaking—in the same place it had been for millennia. To wit, humans were beholden to the omnipotence of Nature, meaning the only way to move themselves from one place to another was by natural means. On land, this meant foot, hoof, or wheel, all of which were powered by animals; on water, it was either human-driven paddles or wind-driven sails. There was little reason to believe human locomotion would ever be any different.

Then, in 1807, an American named Robert Fulton built and ran the first commercially successful “steamboat” in history. In so doing, Fulton achieved something epically important: he proved that humans could create an artificial power to alter where they were, and when they were there, to practical effect. No other invention had achieved such a thing, and accordingly, steamboats may be considered the first “high technology” in history.

But for the first generation of people who saw these newfangled contraptions, the questions were many, and the concerns still more. Early entrepreneurs of steam vessels had to not only promote their new technology, but address those public concerns at the same time, in a wide variety of ways.

In this presentation, historian John Laurence Busch illustrates how early “steamboat” and “steamship” promoters gained the public’s confidence, and connected cities, towns and peoples in a way never before possible.

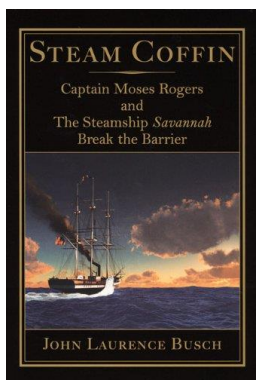
Then, John will analyze modern-day efforts to create autonomous vehicles, and how some of the arguments against them seemingly rhyme with the early resistance to steam-powered vessels ... 200 years ago.

Finally, John will explore the possibility of taking the lessons from the introduction of steam vessels and applying them to the roll-out of autonomous vehicles in the years to come.

Speaker's Bio

John Laurence Busch is an independent historian who focuses upon the interaction between humanity and technology, specializing in the first generation of steam-powered vessels. He has devoted years of research to discovering the true story of Captain Moses Rogers and the steamship Savannah.

The result is STEAM COFFIN, described by numerous book reviewers as the definitive account of what truly is America's sea saga.



Praise for STEAM COFFIN:

“Busch’s supremely readable account...represents the creation of a long-needed missing piece of maritime history...It may properly be termed a page-turner, and is strongly recommended.”

— (mt) *Marine Technology Magazine*

“A beautifully written and engaging narrative...John Laurence Busch has made a major contribution to American maritime history with this fine book.” — *Naval War College Review*

Visit www.steamcoffin.com for more reviews and background.

(Optional) Tour

Detroit National Historic Engineering Landmark

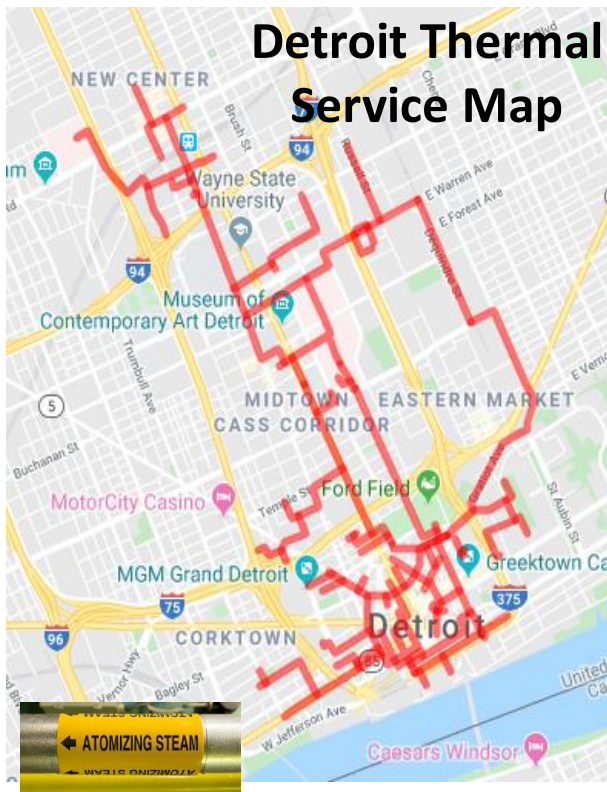
4:00 PM – 5:00 PM

Tuesday, November 19, 2019

541 Madison St., Detroit MI



**Tour available to
dinner
attendees only.**



Detroit Thermal's steam distribution system has been an innovative energy solution for Detroit since 1903. More than 100 years later, it is still providing clean, safe steam energy as effectively as ever--only now, it is partially derived from clean, renewable sources.

Founded in 1903, Detroit Thermal serves many of the city's landmark addresses, including GM Renaissance Center, the TCF Center (formerly Cobo Hall), Fox Theater, Detroit Medical Center, Ford Field, City of Detroit and Henry Ford Health System, among others—more than 30,000,000 square feet of office, medical, industrial and events facilities space in total.

An ESD Affiliate Society Collaborative Event



About the INCOSE CASS Initiative:

The International Council On Systems Engineering (INCOSE) Michigan Chapter *Cities As (Complex) Systems of Systems (CASS) Initiative* advances the application of Systems Engineering (SE), PM-SE Integration, Megaproject Management, and Systems of Systems (SoS) practices to the design, analysis, modeling, simulation, development, construction, integration and management of the complex systems of cities, including the systems engineering of infrastructure. The INCOSE Michigan Chapter is a proud member of the Engineering Society of Detroit (ESD) Affiliate Council and supporter of the Future Cities Competition (6th, 7th and 8th grade STEM education program) administered locally by ESD.



**“Mobility Systems: Land,
Sea, Air and Space”**

About the “Evolution of Mobility Systems” Meeting Series

The “Evolution of Mobility Systems: Land, Sea, Air and Space” meeting series is a series of five dinner meetings, with accompanying optional tours of related interest, offered in select Detroit locations, between November 2019 and August 2020, and culminating in a track at the 14th Annual INCOSE Great Lakes Regional Conference (GLRC14), to be held in Metro Detroit, September 2020.

The meetings in the series explore powered propulsion and mobility systems of all types – Land, Sea, Air and Space – from 1819-2019, reflecting on the current day and the advanced concepts underway, which will propel us into the future, forward toward the next 200 years to 2219, and beyond.

The first meeting welcomes world-renowned historian-author, John Laurence Busch. The series is in support of the INCOSE Michigan Chapter CASS Initiative and in collaboration with the Engineering Society of Detroit (ESD) Affiliate Council.

Save the Date

Visit: www.incose.org/michigan

