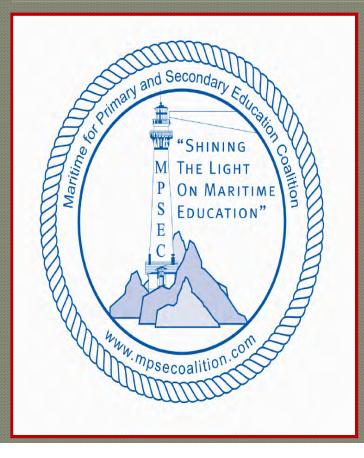
Maritime and Intermodal Education for Primary and Secondary School Students in America

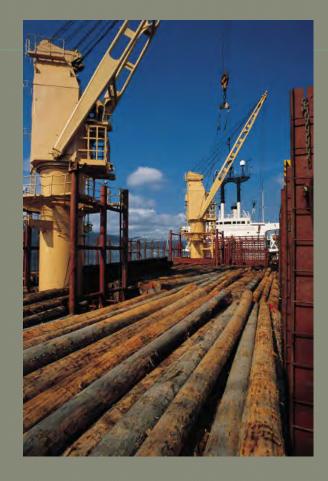
Dr. Arthur H Sulzer Ed D., Captain USN-Ret Maritime for Primary and Secondary Education Coalition (MPSEC)



2013 Conference Teaching with Small Boat Alliance (TWSBA) Mystic Seaport, CT October 15-18, 2013

Current School and Workforce Issues

- Students not graduating high school
- Lack of student interest in STEM education and careers
- Aging Maritime/Marine Workforce
- Shortage of qualified technical workforce
- Loss of Maritime Heritage Awareness



Coalition Objectives

- Motivating urban students to remain in school and graduate
- Educating the public on the the importance of the maritime industry
- Assist maritime industry in replenishing its workforce
- Assist cities and individuals in starting a maritime primary or secondary school program in their city
- Connect individuals, organizations, and employers with maritime schools and educators





October 15, 2013

MPSEC Goals

- Initiate outreach programs to schools
- Advocate for federal funding and grants for maritime education and student loans
- Develop specific maritime curriculums and courses for schools
- Foster conferences and meetings about maritime/marine education
- Create an electronic database of maritime/marine educational materials

Maritime Education and Boat Building Partners in Education and Development

- Boatbuilding develops student self confidence and communication skills
- Practical maritime employment skills learned
- Provides resource(woodworking facility) to the schools
- Continues academic reinforcement after school
- Provides community awareness maritime careers and your organization

Outcomes of Maritime Education

- Student/Parent Interest and Involvement with School and your organization
- **Graduation from High School**
- Academic Engagement
- Academic Grade Improvement
- Marine/Maritime Higher Education Student Interest
- Employment in Marine/Maritime Industry upon Graduation

How Can Your Organization Help?

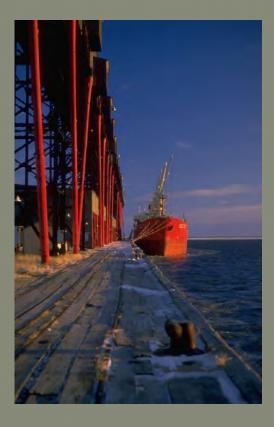
- Become a member of MPSEC
- Connect boat building with academic subjects thru the common core.
- Provide Marine/Maritime post secondary education and career awareness materials at your facility.
- Consider incorporating the "Building to Teach" philosophy/approach to your program

Maritime K-12 Schools in America

- Marine Movement began in 1980s focused on science curriculum/careers
 Maritime Movement began in 1999 focused on careers
- Currently 19 K-12 Marine/ Maritime Intermodal/ Transportation Schools located around the country
- Primary schools integrate marine and maritime subjects in standard curriculum
- High Schools offer specific marine/maritime courses

Maritime School Programs Style and Type

- Integrated
- Vocational
- Apprentice
- Academic
- General Maritime Studies
- Industry Specific
- Company Specific Regional



Maritime High School Programs

- **Vocational:** Specific courses that lead <u>after</u> <u>graduation</u> to direct employment in the maritime industry afloat or ashore
- Apprentice: Specific courses that lead <u>after</u> <u>graduation</u> to 2 3-3 year apprentice program at a shipyard or seagoing union school
- Academic: Specific courses that lead <u>after</u> <u>graduation</u> to a 2 or 4 year academic degree at a Maritime or Service Academy

MPSEC Annual Report Content

- Maritime /Marine Secondary Education Overview Manpower Issues
- Maritime Primary and Secondary Education(Current Programs)
- Outcomes of Maritime Education
- Maritime Education Initiatives (Current)
- E-learning for Primary and Secondary Maritime Schools
- Maritime K-12 Education Assistance (Public/Private) Maritime Education (Future Outlook)

Full Report is available on MPSEC Website

Maritime for Primary and Secondary Education Coalition MPSEC/SOCP

- Information on the organizations
- Contact Todd Ripley at SOCP <u>todd.ripley@dot.gov</u> 202-366-4302 or
- Contact Dr. Art Sulzer at MPSEC sulzmarine@aol.com or 484-459-7726

WEBSITES <u>www.socp.us</u> <u>www.mpsecoalition.org</u>