

International Marine Forensics Symposium

April 3-5, 2012 • National Harbor, MD

Sponsored by ASNE, MTS & SNAME

Marine Forensics Symposium Students Day Call for Volunteers

The Society of Naval Architects and Marine Engineers (SNAME), Marine Forensics Committee is sponsoring the first International Marine Forensics Symposium.

An essential activity of the Marine Forensics Committee is to inspire and teach the next generation of investigators in this exciting field. In keeping with that theme, the Committee is planning a Student Day on the third day of the Symposium that will feature an array of workshops, talks and a panel session across the broad spectrum of topics that fall under the overall umbrella of Marine Forensic Investigations (MFI)

The Marine Forensics Committee invites Educators, Scientists and Engineers to participate in the development of a program for students in Grades 7 through 12.

These volunteers will constitute the MFC Educational Outreach Panel and will be chartered to create and provide guidance for the programs for the day.

Committee Current Membership

Sean Kery (Chairman Education Day Committee)

Jo-Ann Kery (Educator / Librarian)

Pierette Simpson (Educator / Andrea Doria Survivor)

David Barry (MTS Diving Panel Chair)

Mrs David Barry (Teacher)

Susan Giver Nelson (SNAME Sea Perch Program Lead)

Jill Zande (MTS Educational Lead, MTS Sea Perch lead)

Toby Ratcliffe (NSWCCD Carderock division working on educational outreach)

Matthew Werner, Chairman of SNAME Education Committee, (Professor at Webb)

Thomas Hausmann (Retired Teacher)

ASNE Representative (TBN)

RINA Representative (TBN)

IMRST Representative (TBN)

Under Water Archaeology Persons?

Starting Points: This will take a lot of careful organizing to make it successful. At this point we are nearly two years away. We should all contribute our Brainstorm Ideas to the Pot and then we can winnow that down to an achievable program.

General and specific program suggestions should be emailed to Sean Kery at skery@comcast.net by November 1st. Please include a subject line that identifies the email as related to the IMFS education day to avoid spam blocking.

Educational Objectives:

- Increase awareness among pre college students of the exciting career opportunities in the Ocean Sciences, Naval Architecture and Marine Engineering, and Ocean Engineering.
- Engage the students in a relatively fast paced program that will expose them to a cross section of the art and science of Marine Forensic Investigations and the inseparable disciplines of Naval Architecture and the Ocean sciences in the process.

Audience:

The overall topic of MFI deals with catastrophic events and in many cases loss of human life. Grades 7 through 12 are the target audience. This material will be difficult to make appropriate for younger audiences, although some workshops may be appropriate down to 4th or 5th grade.

Audience Recruitment Philosophies of Solution:

There are millions of students within driving distance of the greater Washington DC area and we can handle probably about 500 of them at most.

Step 1. Get the word out to all of the local school boards and school system Science and History leads, probably with help from the state boards of education to get the contact information. We can't complete this till we have a date and venue nailed down but we can begin assembling the mailing list of the school contacts. (Email would probably be best, we need a email bucket account for the replies to come in at.) What about Sea Scouts, Boy Scouts, Girl Scouts? How to contact? We are not gearing this to any one group and should welcome any interested student.

Step 2. Prepare Brochure Materials and tentative topics / schedule of events.

Step 3 Plan Logistics:

- How much cost per student? Requires close coordination from the venue to set the price including some sort of lunch and / or snacks. Do we do Scholarships for N% Needy students or students we decide to specifically recruit?
- Chaparones? Numbers and costs?
- Venue Security, we don't want anyone abducted or sneaking off for teen romances. Volunteers vs venue security vs whatever?

Step 4. Get an actual advertisement out to the students and get set up to handle the returns.

Possible methods of selection from too many applicants include:

1. First Come-first serve registration. (Lots of unhappy campers if they don't get a ticket.) Simplest but does not get us the most interested kids across the population.
2. Allocation by state or county, otherwise we will have 90% participation from 0.01% of the geographic area in the wealthiest areas, again many unhappy campers.
3. Essay contest: We would need a small herd of committed volunteers to read 1000ish half page essays. This is best as we would get the most interested students.

** Lets request Student Papers / Presentations / Backboards and arrange for them to be set up in the hallways or someplace that they can be seen **from the first day** of the Symposium. Best (10? how many) chosen beforehand get to attend the whole Symposium maybe or get to have lunch with the experts on Student day or something. This lets us do two things. 1. We hold (50?) registration slots open to students submitting papers so that the most interested kids are not aced out of attending by the cattle stampede. 2. It gives the regular attendees an opportunity to see what the up and coming generation are interested in and maybe forge some bonds leading to career mentoring, educational opportunities etc.

Topic Ground Rules:

- Cases that involve ongoing litigation will not be accepted to avoid involving SNAME or the MF Committee in any legal problems.
- Presentations should plan on filling 40 to 50 minutes with a 10-minute break between talks. Longer workshops up to half a day should still observe the same break schedule. We will have to work this out with the venue to get actual time slots.
- Workshops with high hands on content are given first preference over slideshow talks.
 - Some workshops may have additional material charges but we need to work that out well beforehand and have everything kitted up for each student or group.
- All presentations should include a variety of activities that engage the students as opposed to merely lecturing them.

- We should try to set up each presentation to include a technical person paired with an educator as each has good things to add to the mix. The expert provides the content but the educator Coaches the method of presentation so that the mix hold the students attention better.

Topic Ideas So Far (Pierette Simpson and others)

- Marine exploration—emphasis on technology
- Marine archaeology—discuss the pros and cons of retrieval of artifacts
- Surviving the shipwreck: first-hand accounts
- Shipwreck and maritime literature—fiction and nonfiction (The Guidelines book already has an extensive Bibliography we can poach to start to create a student reading list handout.) (Great Idea Pierette)
- Shipwreck and maritime films
- Maritime careers: naval architecture and engineering, oceanography, archaeology, ecology, marine biology, etc. (Great for students but how to cover this vast field with out loosing the marine Forensics focus? Handout again might be very well received)
- Shipwreck Marine Life and ecology
- Famous shipwrecks: lessons learned for safety and ship design (With specific instances where laws were changed due to MFIs)
 - Evolution of International Maritime Law due to famous wrecks
 - Overview of shipping world wide and what it means to all economies and countries, even land locked ones.
- Underwater photography: techniques and importance of documentation
- Submarine wrecks
- What it takes to build a ship
 - What it took to build Ships throughout History. (Phil Sims and Larrie D Ferrarro have both written extensively on this)
 - The change from Sail to Steam and its impact on Ship design.
 - Sea Chantys and other Nautical Music
 - Build an ROV workshop(s) MATE and Sea Perch and a program Oceaneering did for take your kids to work day all build an ROV. This could be a half day to longer than full day track and will requires careful study and coordination.
 - Not Necessarily a Boat Race (Students bring in self propelled creations that are not necessarily a boat and compete for prizes)
 - Hands on workshop on Reserve Buoyancy and intact and damaged stability
 - ROV Demonstrations (Commercial outfits could demonstrate their stuff)
 - Oceaneering has an ROV training Simulator that the students could take turns on if OII is willing to loan it. (It was a big hit at take your kids to work day.)

Note: to create interesting sessions, presenters should have visuals, handouts, and or do interactive activities. There should be a tech person available for each presenter, especially if we're the ones that are rotating.

How to plan the day: (Pierette Simpson)

I suggest we start out with a morning session to meet all of the day's presenters in person. They are on the stage. Either each one tells about themselves or someone else does. Each is asked a question prepared by students in advance or each presenter tells what they are most proud of.

Afterwards, depending on the facilities, here are some possibilities to hear presentations:

1. Large auditorium; each presenter speaks
2. Auditorium session followed by smaller group sessions in other rooms (to discuss the topics above)

3. Small sessions only. Students are assigned to topics appropriate for middle school or high school
4. Auditorium plus informational- display booths (see below)
5. Auditorium, small group sessions, and booths
6. (SMK) Demonstrations in large tank of water or the Hotels Pool

For the smaller group sessions, students will have chosen them ahead of time with their teachers. Sessions can be led by the main presenters or they may be student led (. University students), or led by other presenters.

Use of time:

If we do Auditorium session, plus small group sessions, it could look like this:

7:30 to 8:45 Breakfast in Exhibit hall. (Exhibit hall typically breaking down / packing up by lunchtime on last day of symposia)

9 a.m. Auditorium

10 a.m. first group session

11 a.m. second grup session

11 a.m. to 13 p.m. lunch

1:30 p.m. second group session

2:30 p.m. third group session

3:30 p.m. back to Auditorium for a short finale

Exhibit hall:

1. Semester at Sea: a program offering “Ocean Science and Sailing Program”
2. Dive equipment, videos, etc.
3. Maritime museums, sanctuaries, societies (ie. historical, shipwreck, Jacques Cousteau)
4. Career information
5. Universities and academies give information of their maritime programs
6. Vendors of maritime memorabilia and books/videos, etc.
7. Main presenters signing books, etc.
8. Educational: geared for teachers (giving them a lesson plans, units, sources, speakers, etc.)
9. Shipwreck Artifacts
10. Technical Devices ROVs etc.

Potential Problems to Consider:

1. The MD, VA, DC, DE, Penn., W VA area all have different laws regarding childrens programs. We need to find out what if any effect those will have on this program.
2. Security: This is a huge potential problem as we need to prevent anything strange from happening including:
 - Teens taking off by themselves or in pairs for romantic entanglements
 - Possible abductions / predators
 - Vandalism avoidance
 - Any tension between rival schools
3. Chaperones: How many, what do they take part in versus only observe
4. Parking for busses
5. Limiting the number of students / scaling the size of the program to match the crowd expected.
6. What to do in case we have No-shows either in large groups of students