## Trident Time - S.S. MORRO CASTLE - 1934 Fire

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I will be presenting on the passenger vessel SS MORRO CASTLE fire. There are numerous lesson learned and changes to regulations and CG policy both in regards to the Prevention community and Response and cutter communities; however, as a recent fire protection engineering graduate and newly reported member of ENG-4, I wanted to present a Casualty that provided enormous change to fire protection on ships and how this Casualty relates to ENG.

The SS MORRO CASTLE was commissioned in 1930 as a luxury cruise ship making voyages between NYC and Havana, Cuba. At 0245, on September 8, 1934 a fire was reported within a closet. The fire quickly spread throughout the ship due to wood\lacquered walls, travel via electrical cabling, and fire doors remaining open. Fire fighting efforts failed because of insufficient fire main pressure due to multiple hydrants being open. Only 6 of 12 lifeboats could be launched, with only 85 people in them. In stormy conditions, crew and passengers were faced with the decision to stay aboard, likely burning, or jump overboard and risk drowning. Of the 549 people on board, 134 died. The cause of the fire was never determined.

After the MORRO CASTLE casualty and the sinking of the MOHAWK in 1935 which improved subdivision criteria, the Senate Committee on Commerce made sweeping changes to commercial vessel regulations and the structure of the Bureau of Marine Inspection and Navigation. Multiple subcommittees were formed under Committee on Commerce and the research and testing performed by the subcommittee on Fireproofing and Fire Prevention made important strides in Fire Protection on ships which are still active in our regulations today. Examples are: Fire Protection zones with insulated steel bulkheads, means of escape from each deck within that zone, hinged-fire doors with automatic closures from a central location, compartment construction of noncombustible materials, and protection of escape routes by use of noncombustible materials.

In addition to the regulatory requirements in Fire Protection Engineering, the resulting investigation also led Congress to enact a law adding to the responsibility and capability of the Bureau of Marine Inspection and Navigation. The law adds "Under the Assistant Director in charge of Material Division of the Bureau in the District of Columbia, a technical staff, the members of which should have the necessary background of matters, of whatever nature, having to do with the design and construction of ships to include Naval Architecture, Marine Engineering, and Electrical Engineering." This law is the origins of ENG and MSC.