2024 NDC Conference:

Advancing Naval Damage Control

Presented By
Josh and Landon Pann





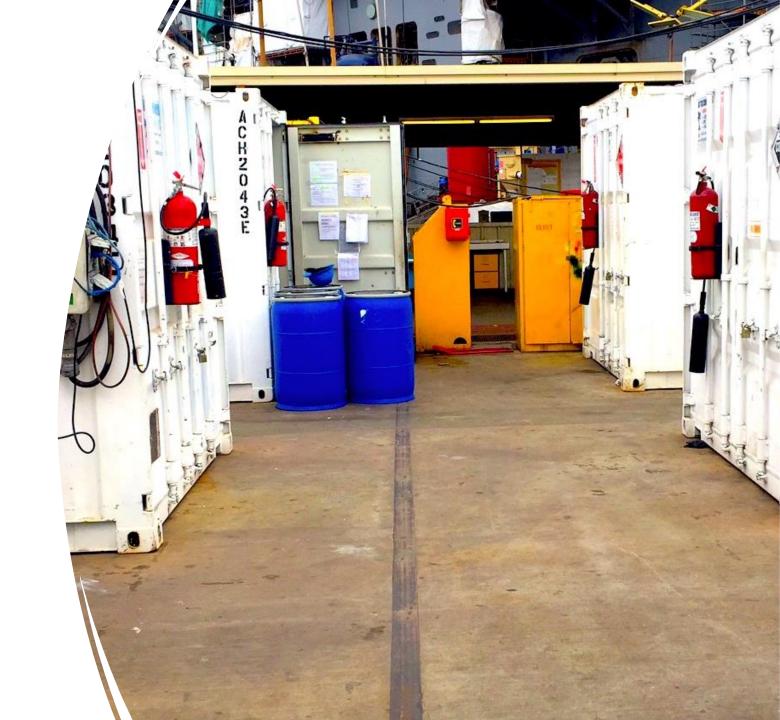








The Need for **SECURE** Hazardous and Flammable Storage





EVERY MARINE A RIFLEMAN, EVERY SAILOR A FIREFIGHTER.



The morning of July 12, 2020

Sunday 08:00 Smoke was reported on

the USS Bonhome Richard

- Nearly completed \$249 million dollar
 1.5 year Avail
- Fed Fire and SD Fire department arrived approx two hours after the fire had started
- Helicopters and tugs fought the fire four days later, the 1.2 billion dollar ship was lost

Tragedy is a tool for the

living to gain wisdom.

-Robert F Kennedy





"Keep them fit to fight"





NAVSEA mission statement

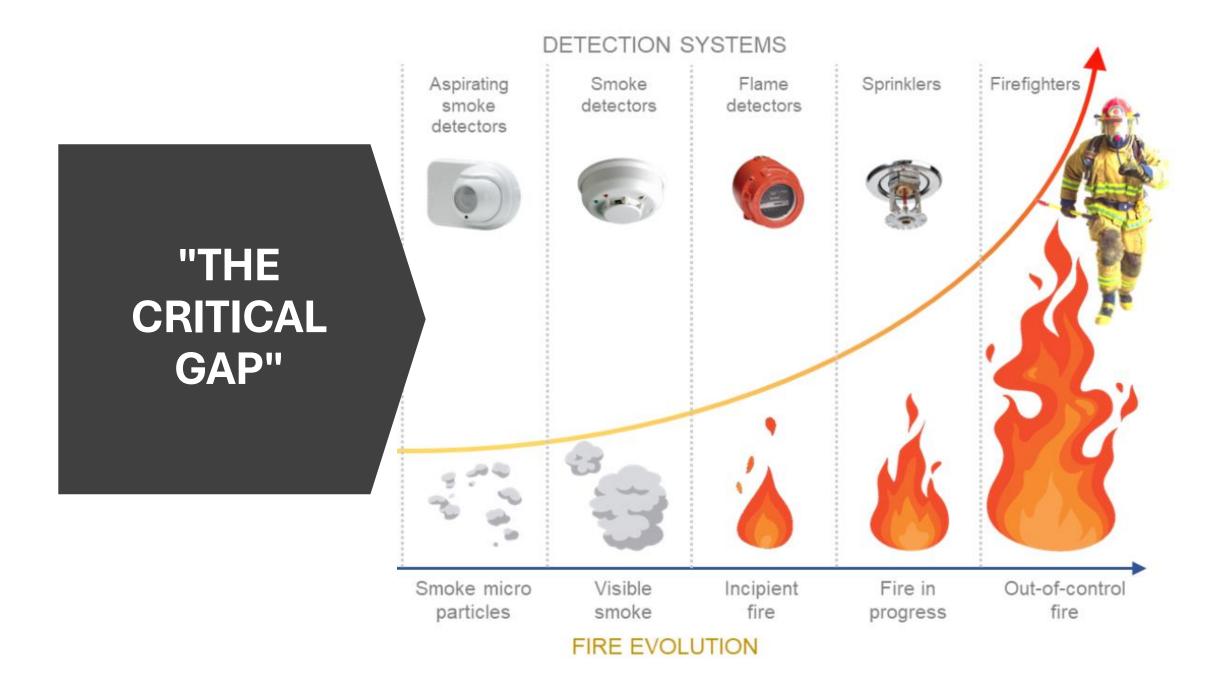






Every thing a place and every place a thing.-Soichiro Honda







DAMAGE CONTROL CONTAINER SPECIFICATIONS

- Meets all NFPA Standards
- Capable of Housing (18) Personnel Gear
- 25,000 BTU Air Conditioning, Heating and Dehumidification for Safe Gear Storage
- Secondary Rear Egress to allow quick personnel outfitting
- Convenient 240volt / 60amp Electrical Connection. Single or 3 phase available
- Main Entry Door with easy open oversized single door handle for easy open/close
- Additional Electrical Outlets in each locker for individual equipment charging such as Radio, Flashlight or Tool Charging



DAMAGE CONTROL CONTAINER SPECIFICATIONS

- 2-part Epoxy Industrial Floor
- Energy Efficient LED lighting
- Marine Resistant Galvanized Steel Interior Shelving with 1/2 inch lip for secure Gear Storage at Sea or at Port
- Scuff-proof SCBA Bottle Storage for up to (20) 30 or 45 minute bottles
- 6-foot Industrial Work Bench with 110volt outlets for all your charging needs
- RacPac Utility Wall Board for equipment organization and quick access





INITIAL TRIALS







BAE SYSTEMS



GENERAL DYNAMICS









DAMAGE CONTROL IS PREVENTION & RESPONSE













Hazardous Storage Containers



















REAL WORLD SCENARIO

- Nov 9, 2018 BHR avail received 9 Hazardous Materials Containers
- Nearly at the end of 2.5 year avail the units were close to max cap
- 50ft from the ship
- No fire was spread to the pier or Naval Facility
- Investigations found they operated above performance standards
- Job well done garnered the attention of NAVSEA







DEMAND IN THE PUBLIC SECTOR

- SPACE X
- GULFSTREAM AERO
- BECHTEL
- THERMO FISCHER
- SOLVAY
- TESLA
- LUCID
- NAVISTAR
- INTERNATIONAL







WEST TEXAS
MANUFACTURING
FACILITY

THE ELECTRIC FUTURE

- Risks of battery power
- Steep learning curve
- Safety systems are still in their infancy
- Traditional prevention and response are not yet effective
- Battery driven damage control incidents are growing by the year



IN THE PAST YEAR TWO MAJOR **LITHIUM BATTERY PLANT** FIRES IN SAN DIEGO

- **Escondido** Sep 5, 2024 Containerized Storage
- burned for 48 hours
- Estimated 8 million gallons of water
- Otay Mesa May 19, 2024 Warehouse
- burned for 13 days
- Estimated 20 million gallons of water



"We see fires involving lithium-ion batteries approximately three times a week in the city of San Diego alone" -San Diego Fire-Rescue Battalion Chief Rob Rezende



HAZARDOUS STORAGE CONTAINERS CURRENTLY IN THE EVINDUSTRY









