

NSRP

National Shipbuilding Research Program

Boomlift Carried Environmental Enclosure (BCEE)

22 May 2018

SPC Panel meeting

Mega Rust



Background

- Current ship hull painting practice - Airless paint spray application
- Generates large amounts of overspray (> 30% by weight).
- Overspray contains copper and zinc that settles onto the dock floor and can drain into waterways/estuaries and industrial areas.
- Overspray containment is costly and impacts productivity.
- Controlling resultant discharges by capturing and treating all storm-water runoff is technically and logistically difficult and costly.



BCEE Characteristics

- 230 lbs
- Light weight enclosure
- Sensors
- Training module
- Tilting basket
- The Seal
- Basket Installation



Project Status

- A number of delays have plagued the project. We are back on track and will deliver the final report in June.
- Completed training and beta testing BAE JSR
- Demo completed at BAE Systems JSR floating dry dock, US Navy DDG.
- Second demo completed BAE JSR
- Second unit has been built and shipped to NASSCO San Diego, demo this week.
- Demo at NASSCO scheduled for May 21 , 22.
- Unit is scheduled to be shipped back the BIW pending funding and time remaining we will conduct a demo and leave the unit there.



Between dock and wing wall.....



Not Export Controlled per PS-
2018-DR-469



It gets a little tight....



Not Export Controlled per PS-2018-DR-469



Basket is at right angle to boom



Not Export Controlled per
PS-2018-DR-469



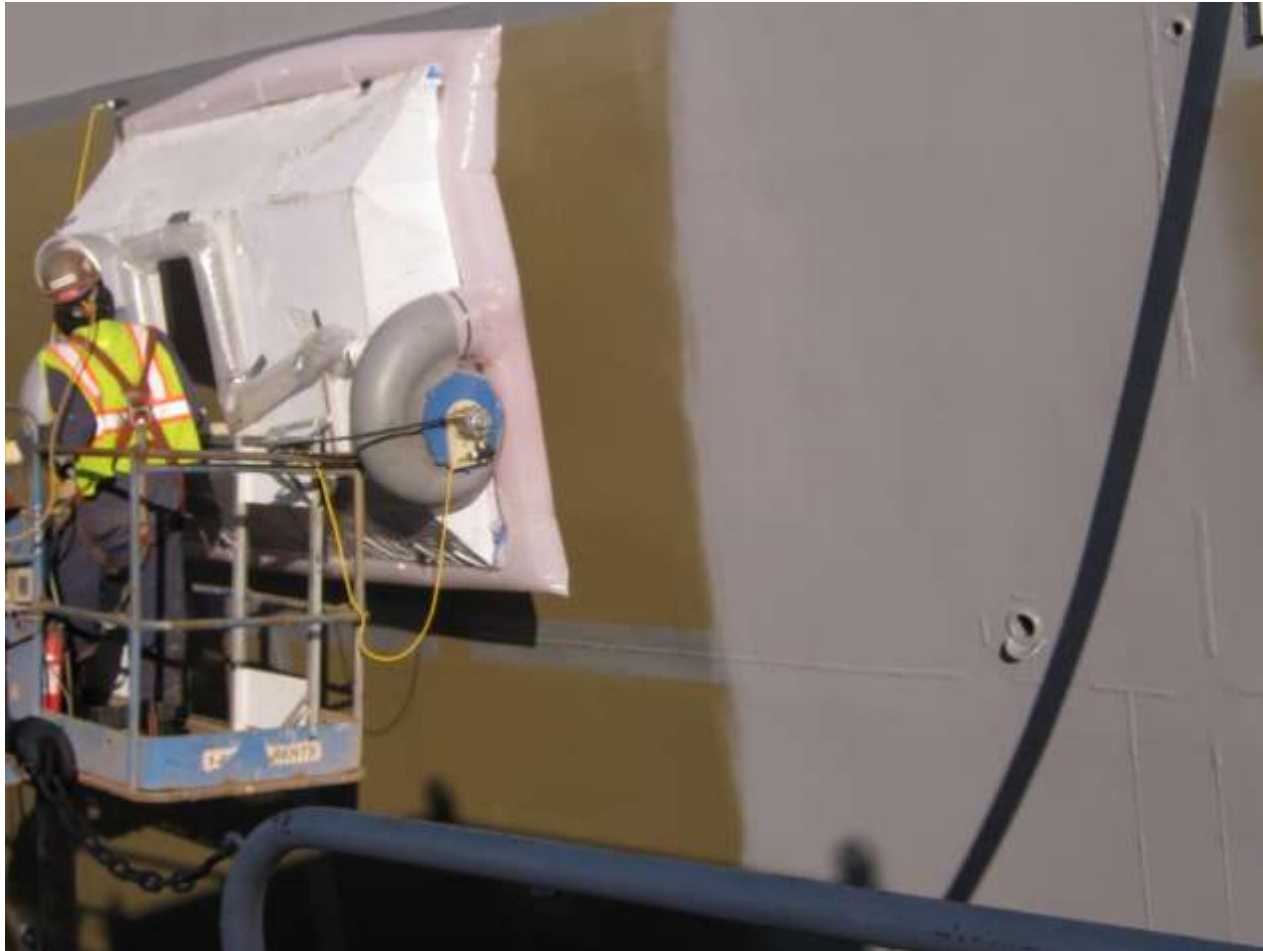
Performance is good but production is slower



Not Export Controlled per PS-2018-
DR-469



Look at the straight spray line, air knife is keeping overspray in the filter bank.



Demo #2 Open airless spray



Not Export Controlled per
PS-2018-DR-469



Hi reach perpendicular to the ship. Best capture rate, highest productivity



Not Export Controlled
per PS-2018-DR-469





Stay perpendicular around the curvature of the bow



This side of the ship was painted in 40 minutes




Not Export Controlled per PS-
2018-DR-469



This side of the ship was painted in 60 minutes



Not Export Controlled per PS-
2018-DR-469

A large white and yellow ship hull is shown under construction in a shipyard. The hull is the central focus, with a white upper section and a yellow lower section. It is supported by a green metal structure. In the background, there are various shipyard structures, including cranes and masts, under a clear blue sky. The text "Not Export Controlled per PS-2018-DR-469" is overlaid in the bottom left corner.

Not Export
Controlled per PS-
2018-DR-469

After the spray



Boomlift Carried Environmental Enclosure

BCEE

Stephen Cogswell
BAE Systems JSR
Stephen.cogswell@baesystems.com

Norx LLC
Hagerstown, Maryland
norxllc@comcast.net

