

Mechanized Recovery of the CSS Georgia

Jeffrey Pardee

Panamerican Consultants Inc.

SHA Conference 2016

Washington, D.C.



Savannah
DISTRICT



US Army Corps of Engineers
BUILDING STRONG®



CSS Georgia Site Location

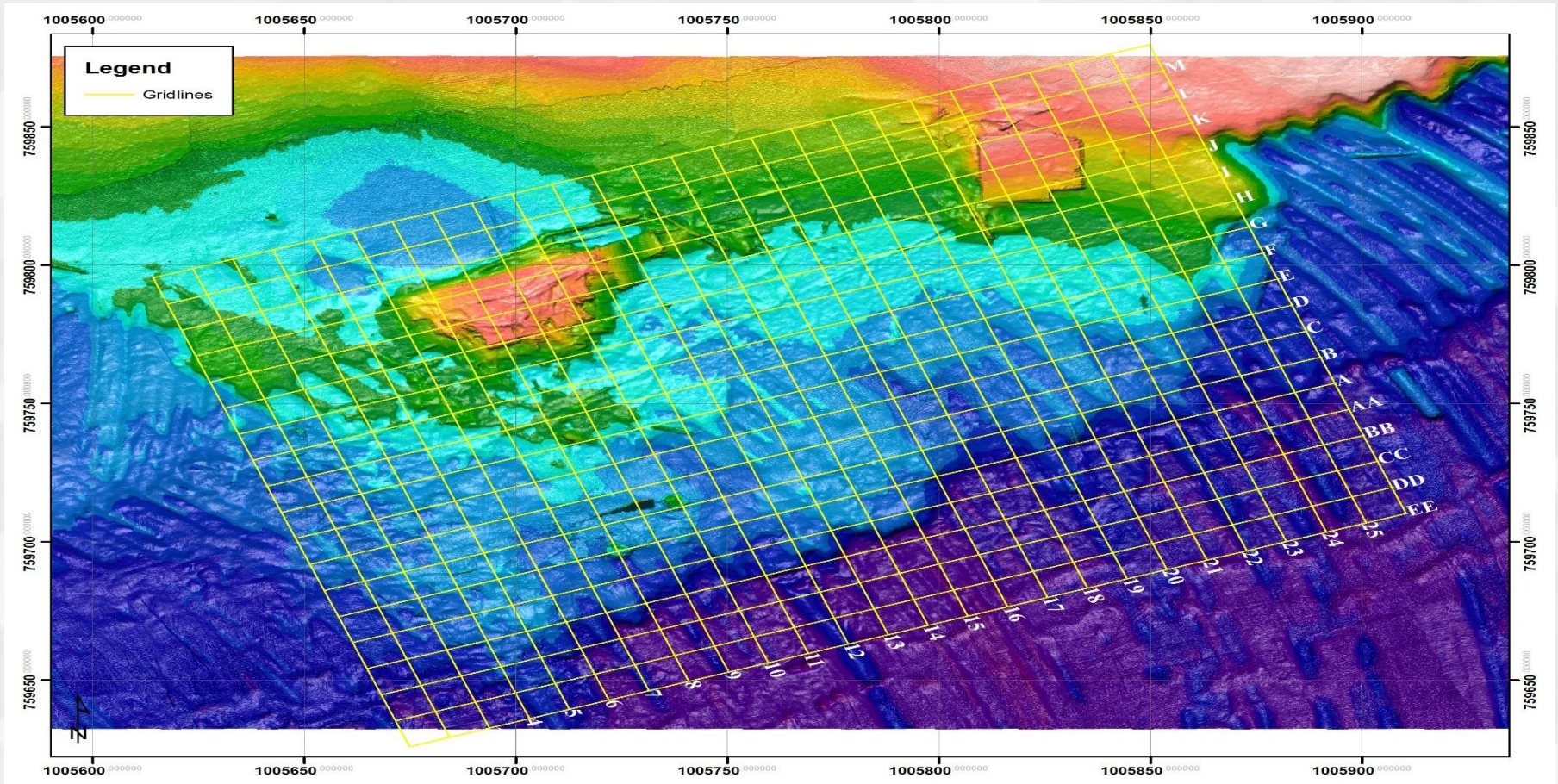


Wreck site sits within the SHEP channel expansion area.



BUILDING STRONG®

Multibeam Site Map



Multibeam overview of the CSS Georgia Site



BUILDING STRONG®

Introduction

- South Carolina and Georgia State Historic Preservation Offices (SHPO) determined that the area where the CSS Georgia resides would be adversely affected by the Savannah Harbor Expansion Project.



BUILDING STRONG®

Coordination and Planning

- Savannah District Corps of Engineers (USACE) entered into an agreement with the respective SHPOs and Navy History and Heritage Command (NHHC) to mitigate adverse effects to the site by removing the wreck
- This was accomplished via an interagency services agreement between the USACE and the U.S. Navy



BUILDING STRONG®

Coordination and Planning

- US Navy Supervisor of Salvage and Diving (SUPSALV) and its contractor Donjon Marine Company Inc. performed the work with Panamerican Consultants, Inc. (PCI) and Conservation Research Lab (CRL) providing archaeological consultation
- A detailed recovery plan was developed through the coordination of all parties involved
- It was recognized that the experimental techniques utilized would likely require modifications based on in-field findings



BUILDING STRONG®

Coordination and Planning

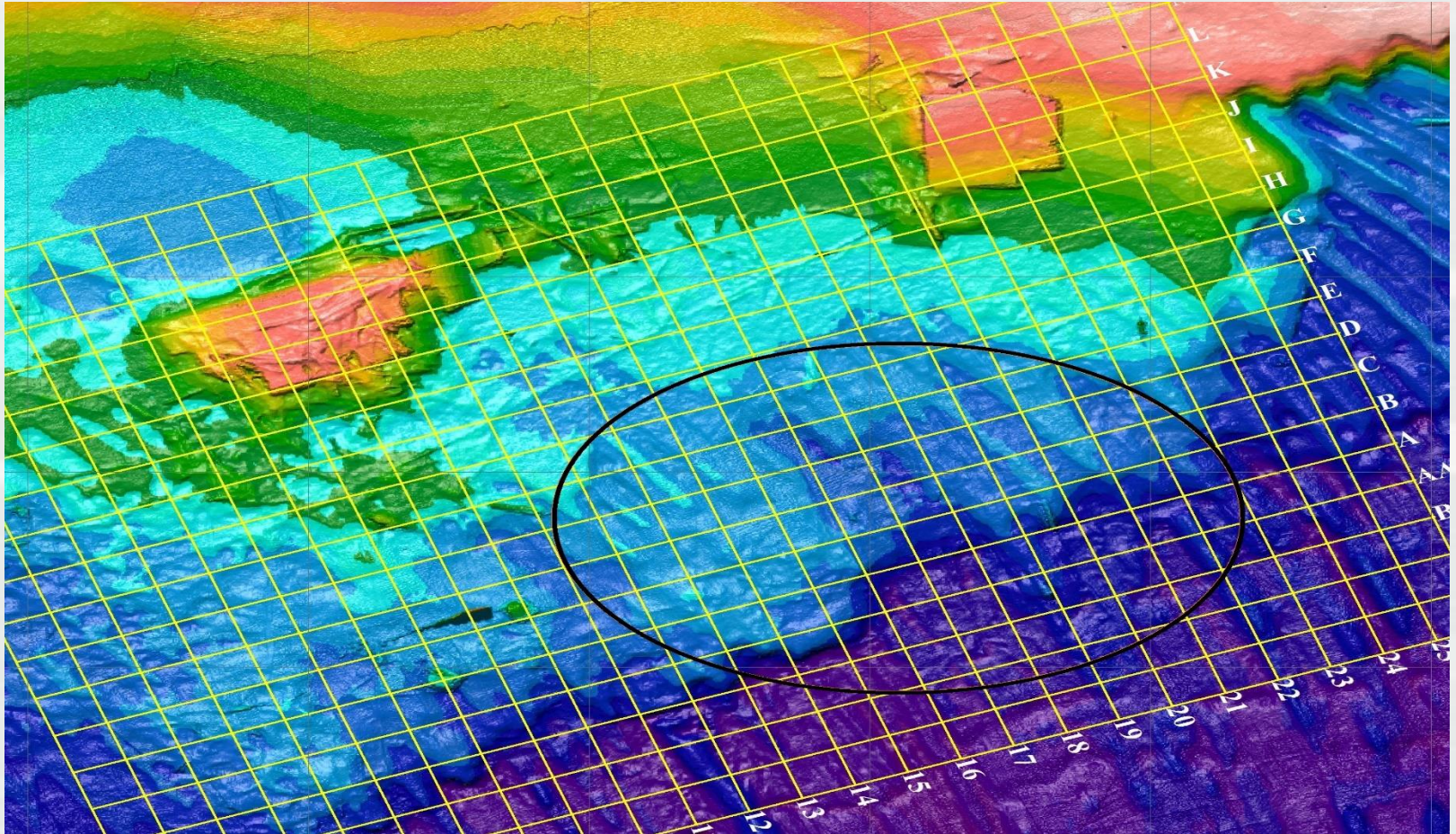


Recovery efforts commenced in June aboard these two barges by SUPSALV, Donjon, Explosive Ordnance Demolition Mobile Unit 6 (EODMU6) and Mobile Diving and Salvage Unit 2 (MUDSU-2)



BUILDING STRONG®

UXO/DMM



DMM area circled



BUILDING STRONG®

UXO/DMM



Ordnance basket with steel buckets

UXO/DMM



Ordnance basket being lifted to the project



BUILDING STRONG®

UXO/DMM



Navy divers entering the water and coordinating with archaeologists on DMM locations



BUILDING STRONG®

UXO/DMM

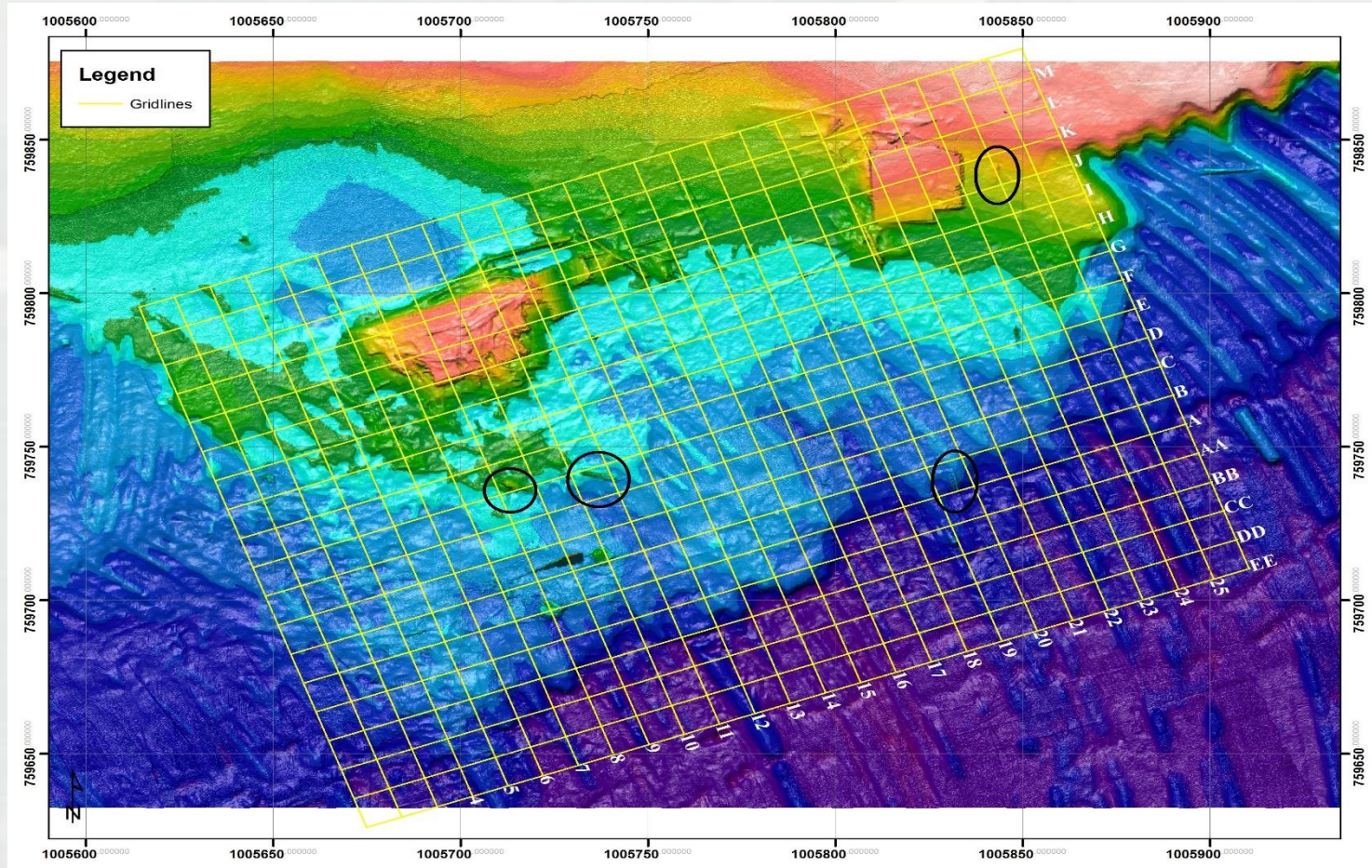


DMM baskets awaiting transport



BUILDING STRONG®

Cannon Recovery



Locations of the 4 recovered cannons



BUILDING STRONG®

Cannon Recovery

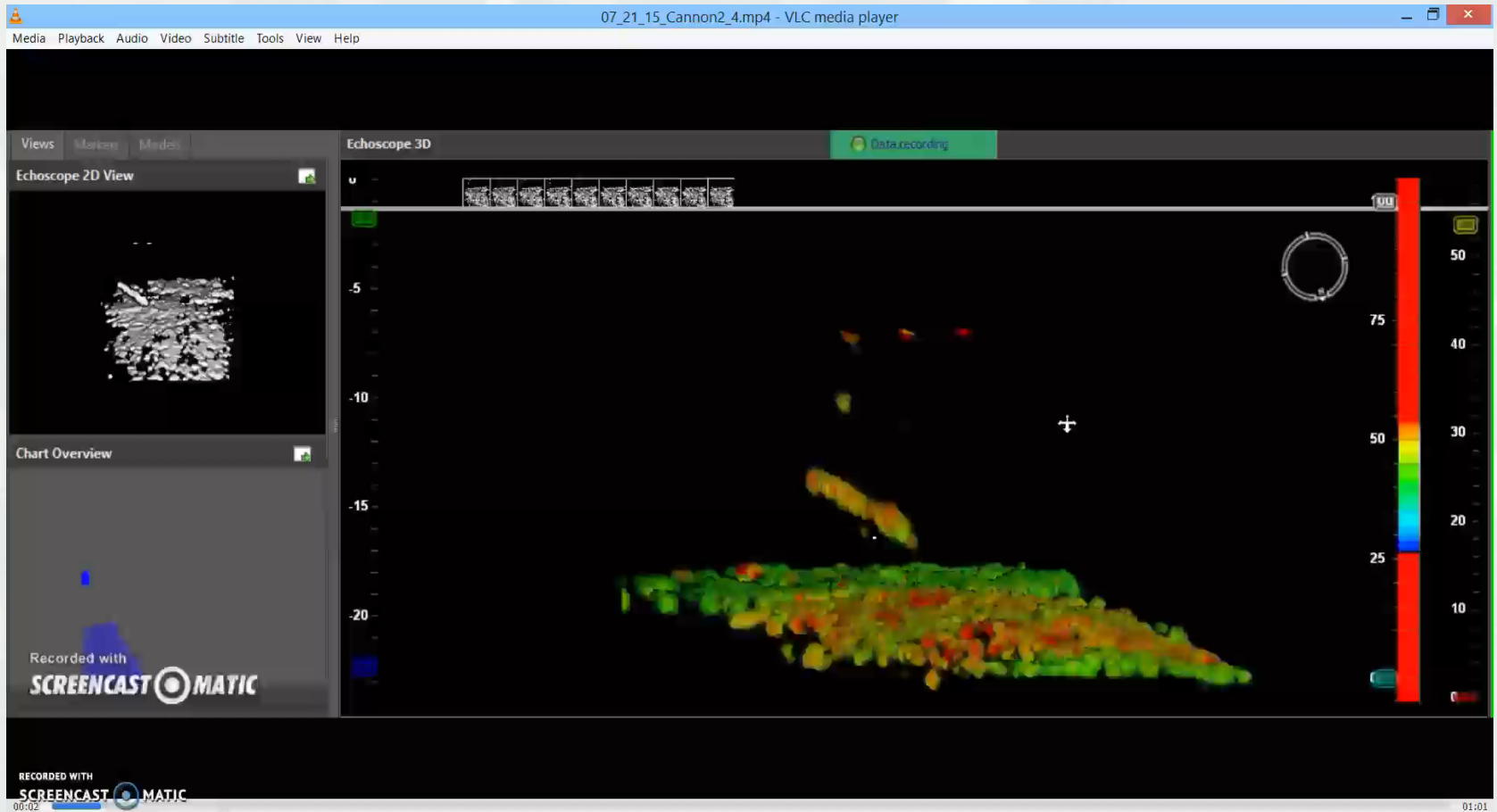


Example of how the cannon were rigged and lifted



BUILDING STRONG®

Cannon Recovery



Coda video of cannon 1 lift



BUILDING STRONG®

Cannon Recovery

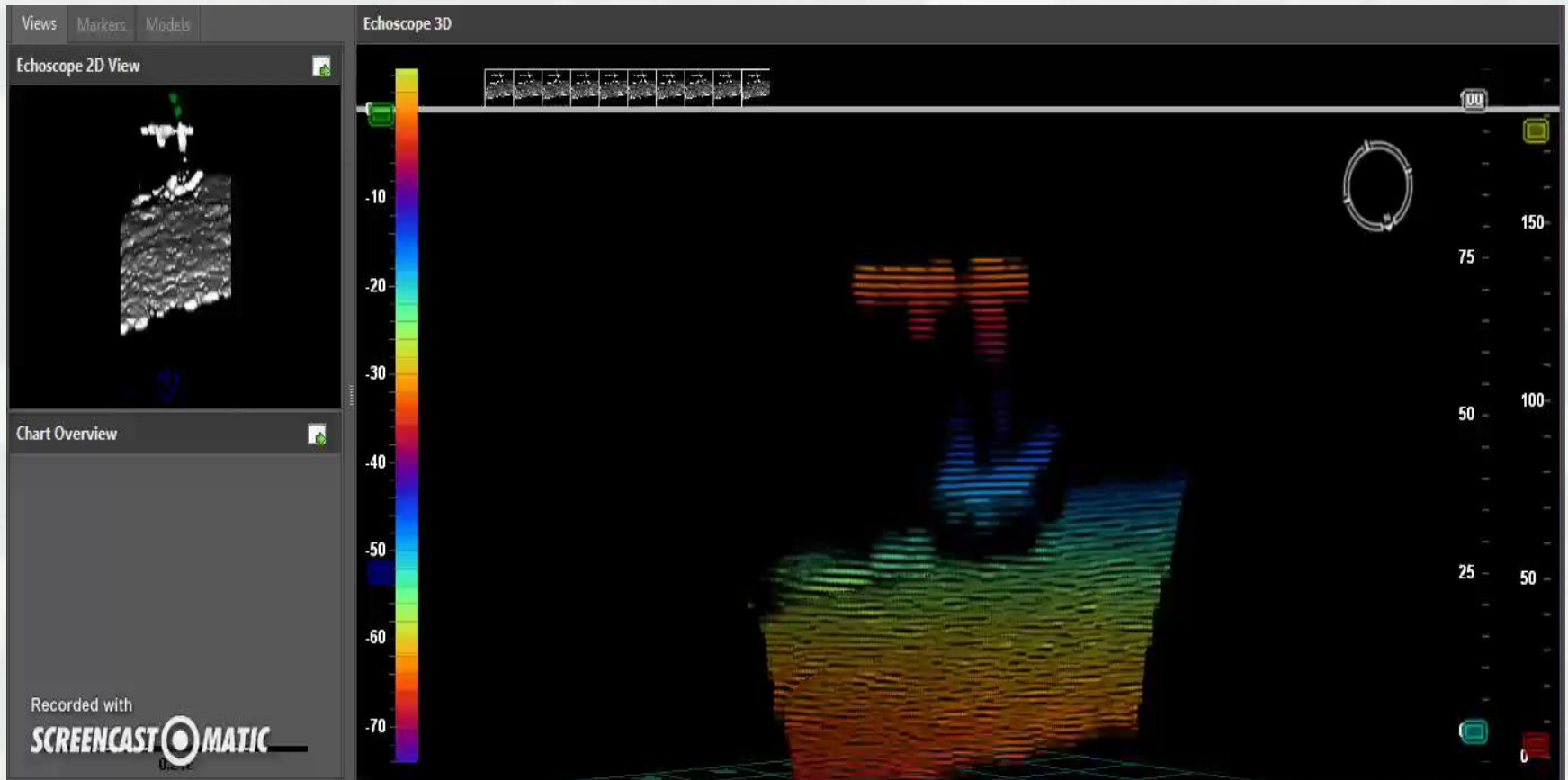


Cannon being set in container where archaeologists wrap it and install a hose



BUILDING STRONG®

Large Artifact Recovery



Coda video of propeller and shaft lift



BUILDING STRONG®

Large Artifact Recovery

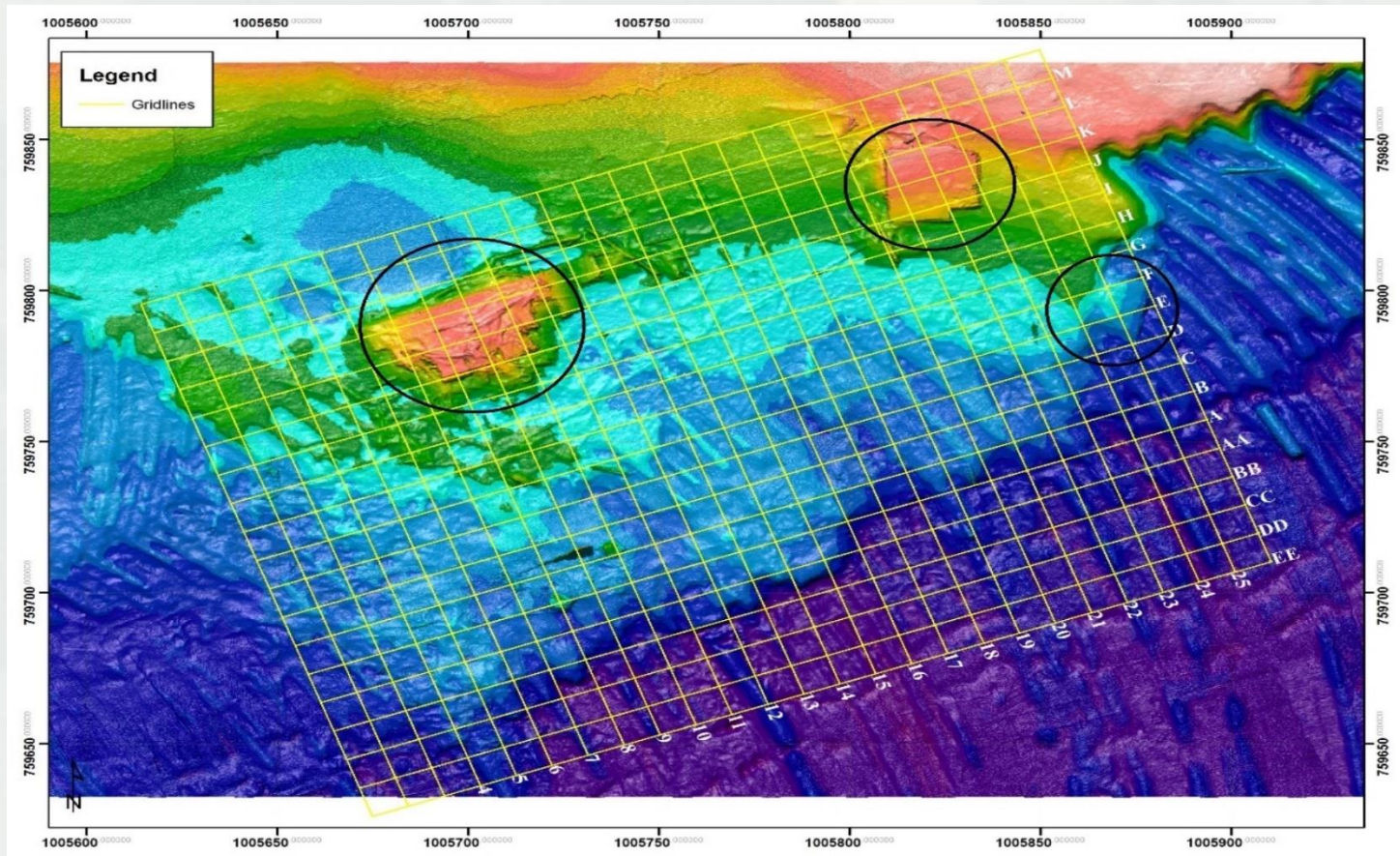


Condenser and Propeller and Shaft



BUILDING STRONG®

Casemate Recovery

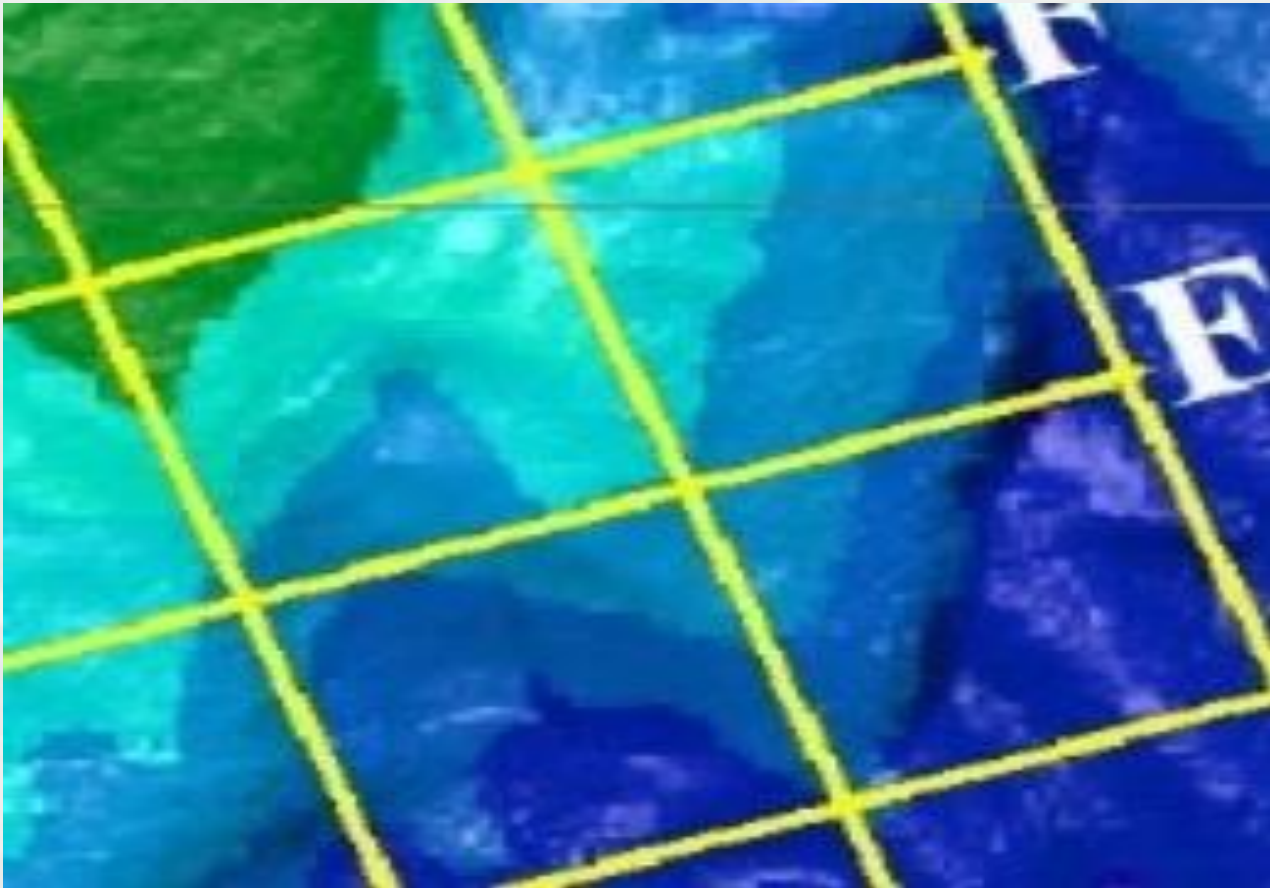


West, East and Southeast Casemate sections



BUILDING STRONG®

Southeast Casemate



Southeast Casemate



BUILDING STRONG®

Southeast Casemate



Examples of tools used by Navy divers



BUILDING STRONG®

Southeast Casemate

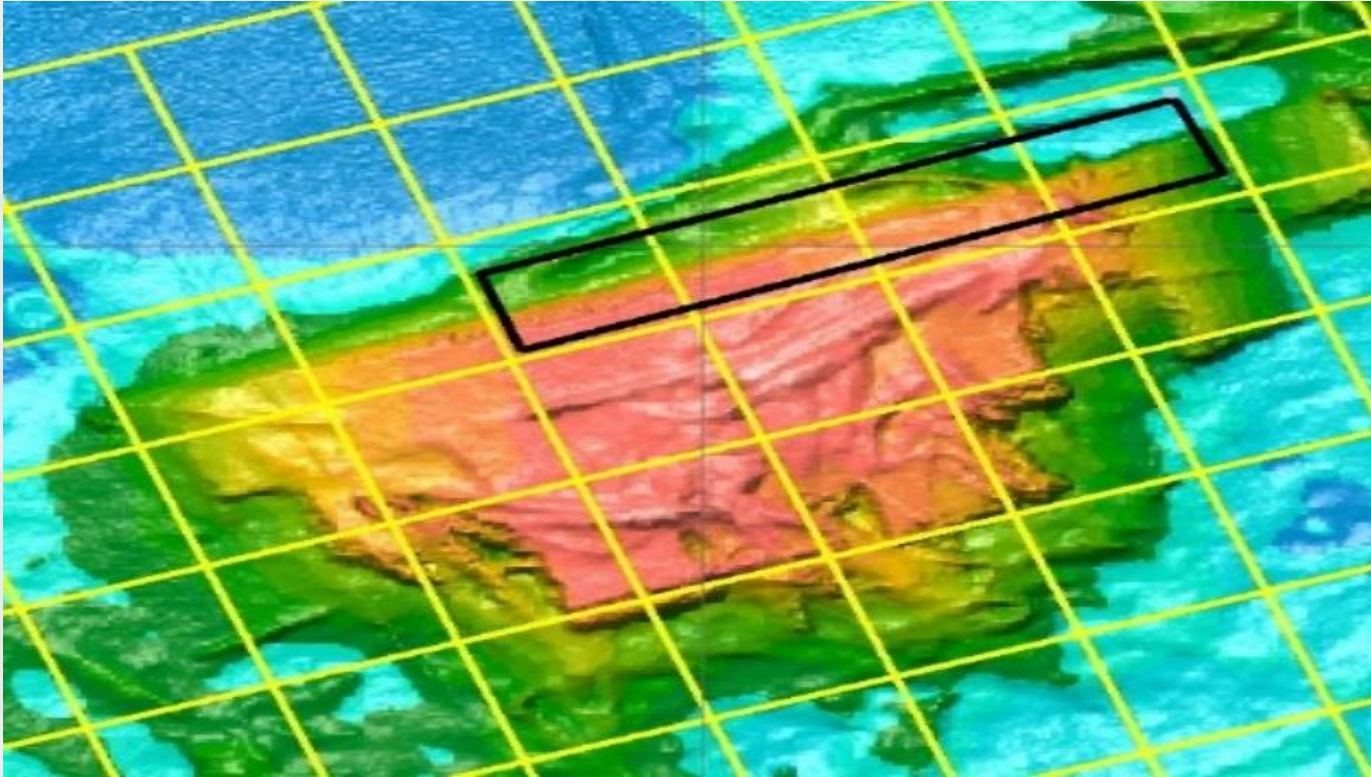


Image of the Guillotine



BUILDING STRONG®

Southeast Casemate

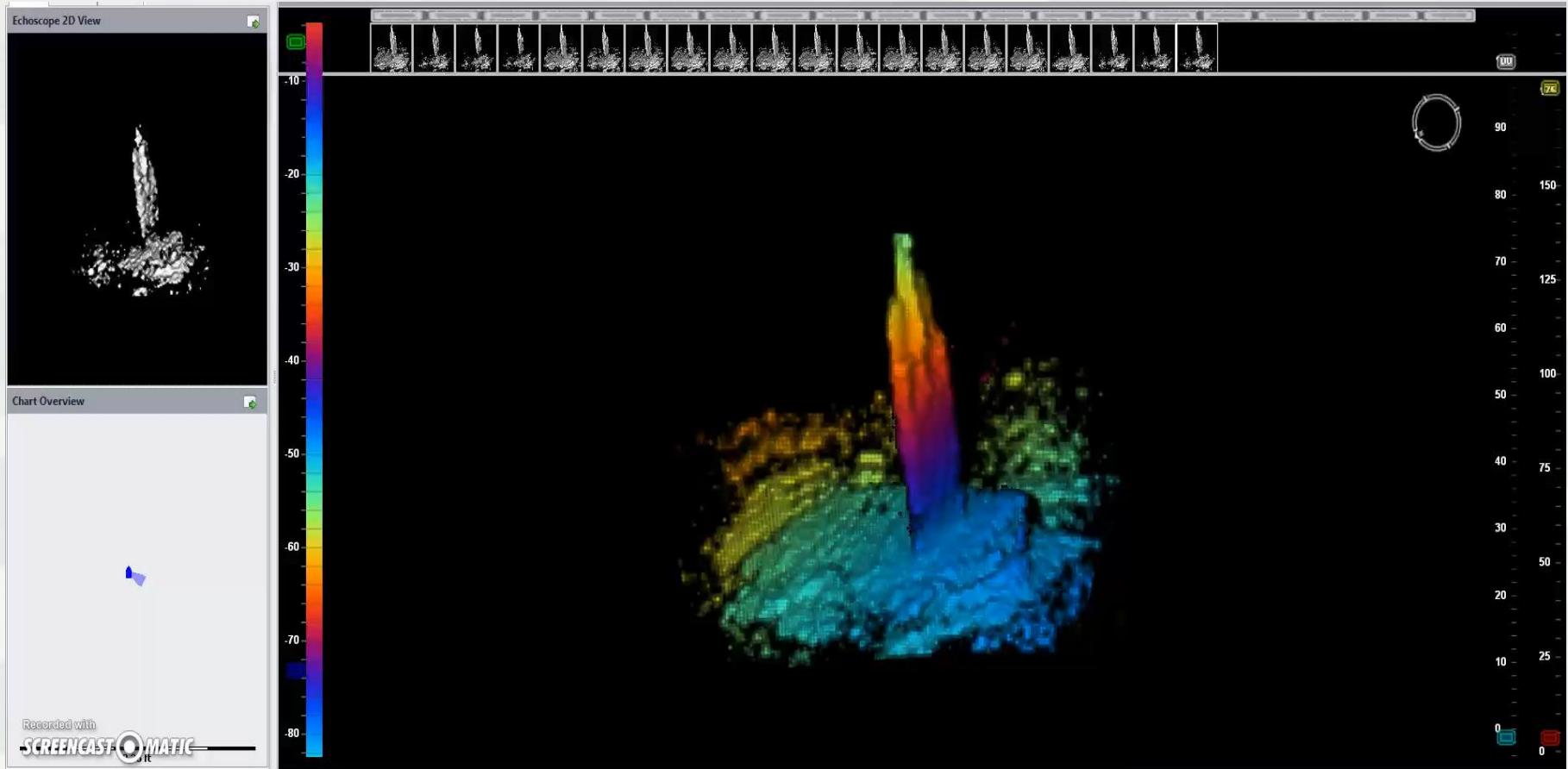


Before the Guillotine was used on the Southeast Casemate, it was used on a small section of the West Casemate highlighted above



BUILDING STRONG®

Southeast Casemate

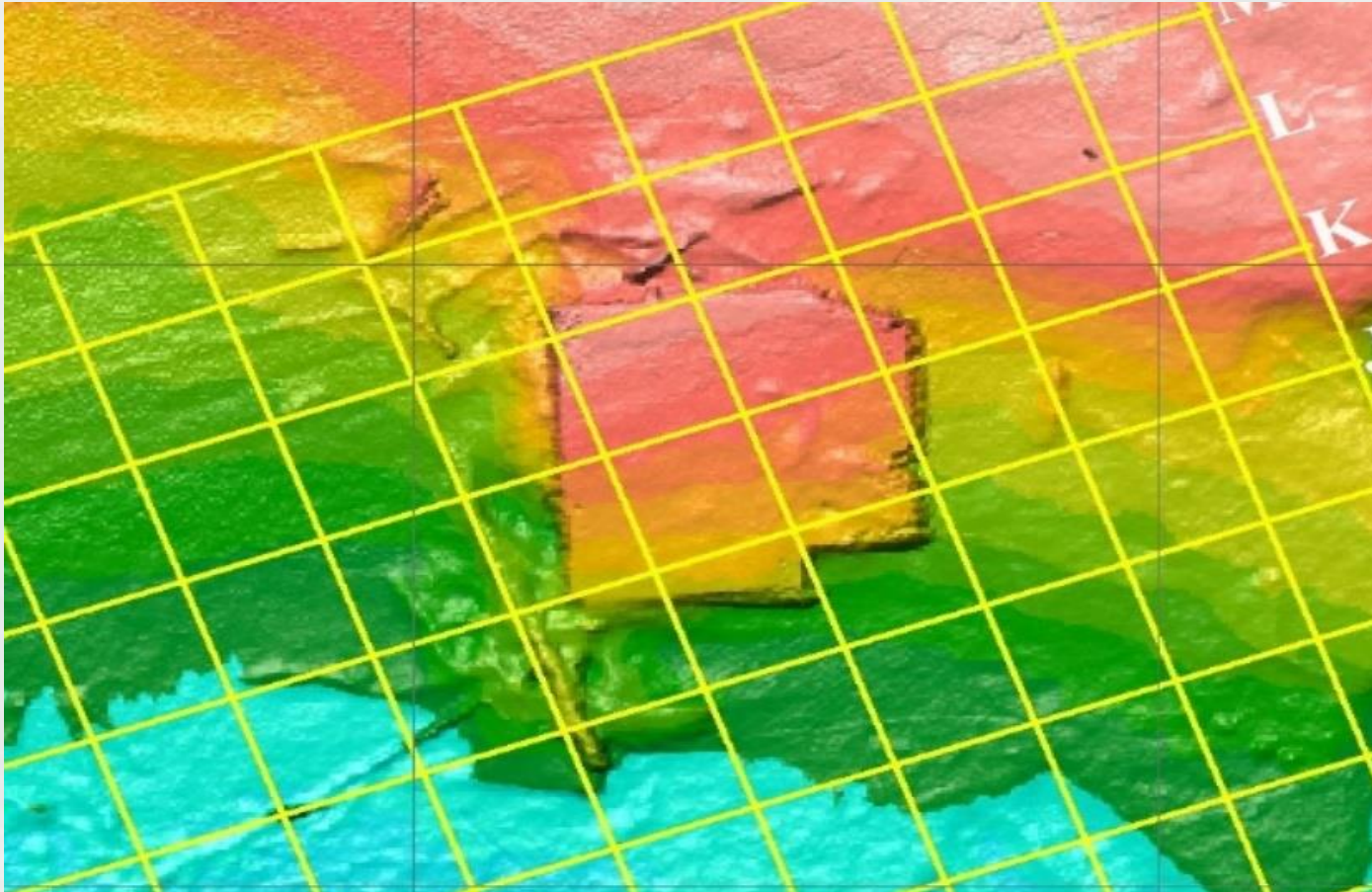


Coda video of Guillotine



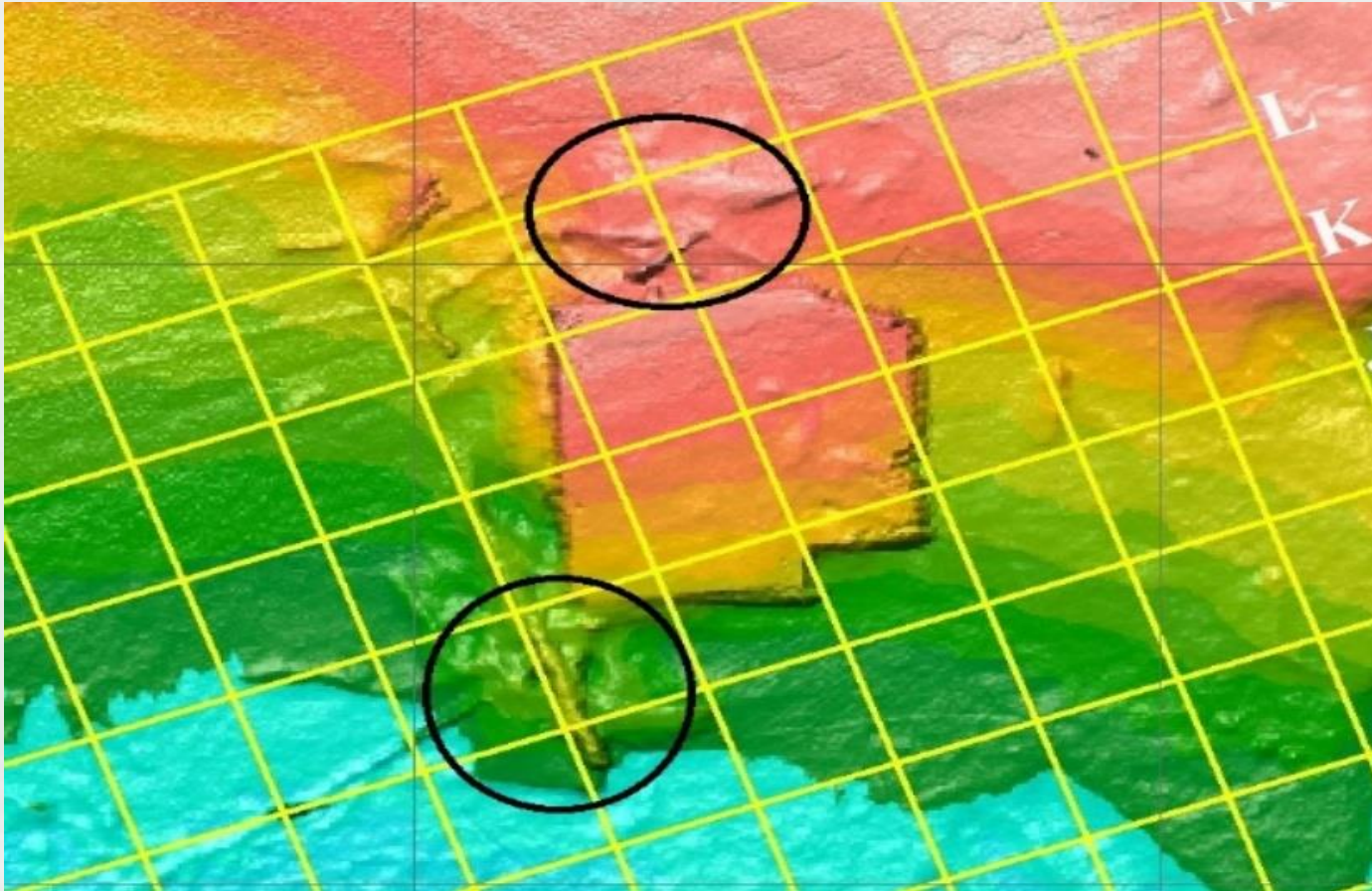
BUILDING STRONG®

East Casemate



BUILDING STRONG®

East Casemate



East Casemate with small sections highlighted



BUILDING STRONG®

East Casemate



Lift of small East Casemate sections



BUILDING STRONG®

East Casemate

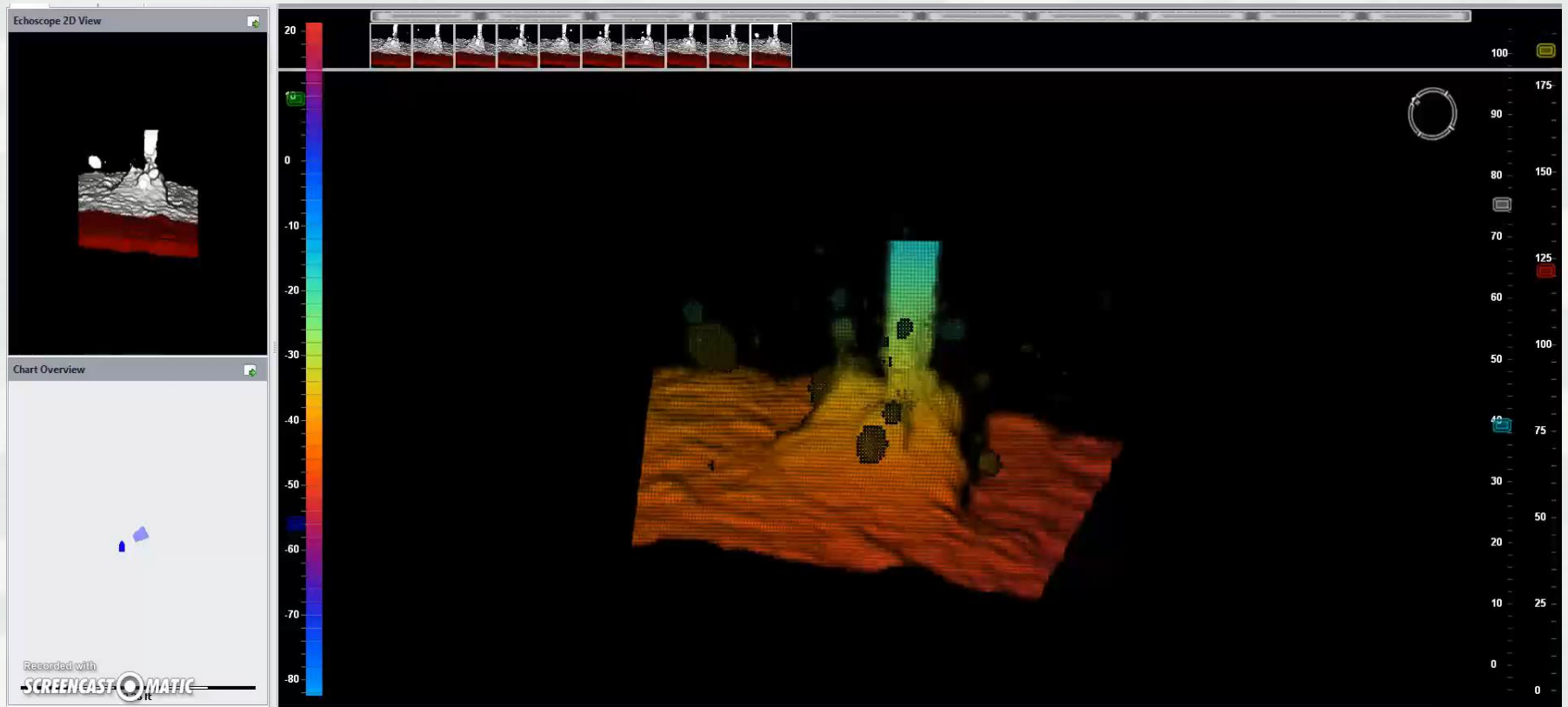


Small East Casemate sections on deck supported by timber baulks and being banded



BUILDING STRONG®

East Casemate



Coda video of the East
Casemate Lift



BUILDING STRONG®

East Casemate



East casemate lift with frame and cables in view

Mechanized Site Clearance Phase

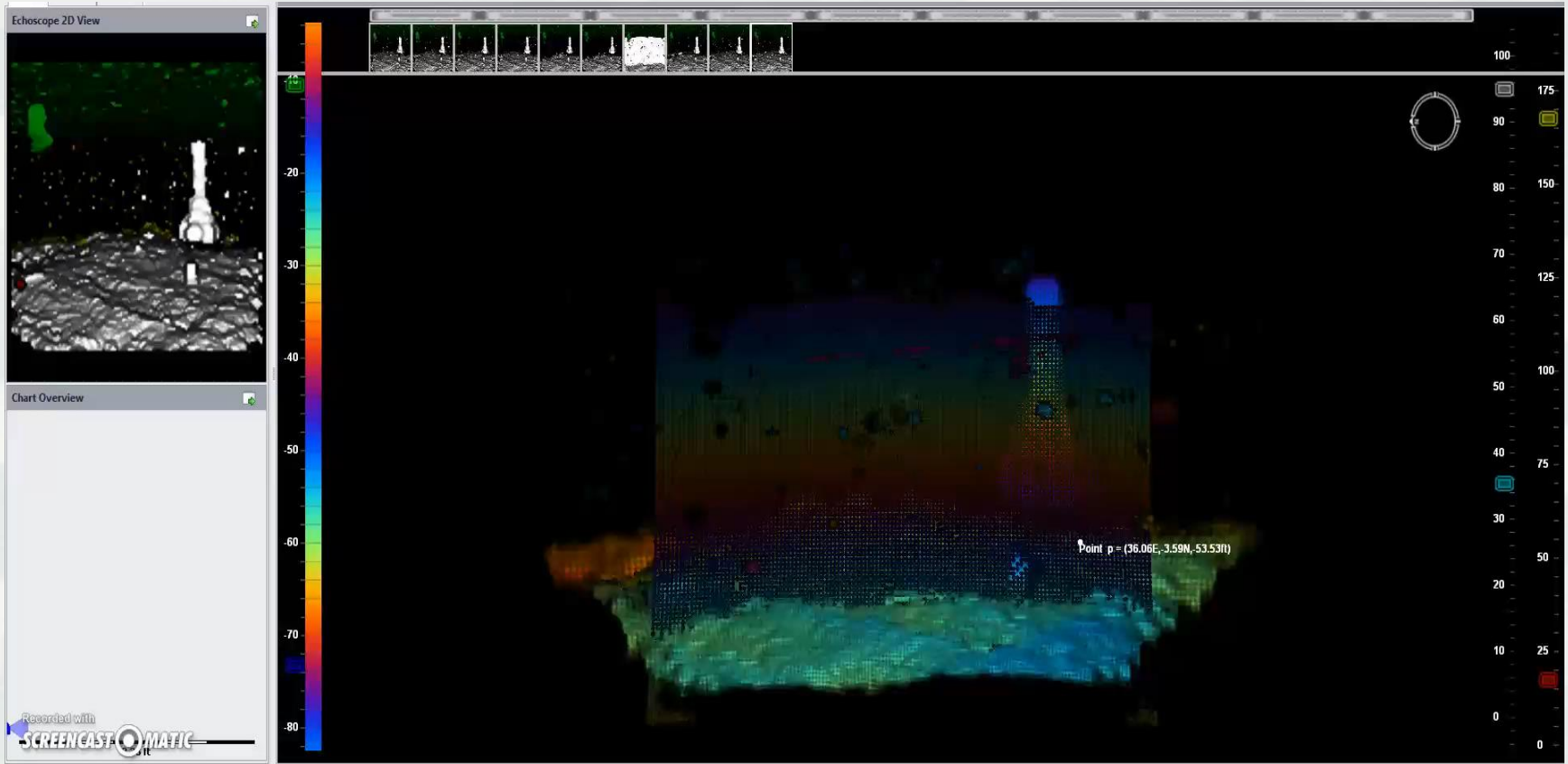


Grapple (Left) and Clamshell (Right)



BUILDING STRONG®

Mechanized Site Clearance



Coda video of Grapple



BUILDING STRONG®

Mechanized Site Clearance



Archaeologists cleaning loads dumped in their respective bays



BUILDING STRONG®

Mechanized Site Clearance



Archaeologists cleaning loads dumped in their respective bays



BUILDING STRONG®

Mechanized Site Clearance



Archaeologists sift through base material looking for small artifacts



BUILDING STRONG®

Mechanized Site Clearance

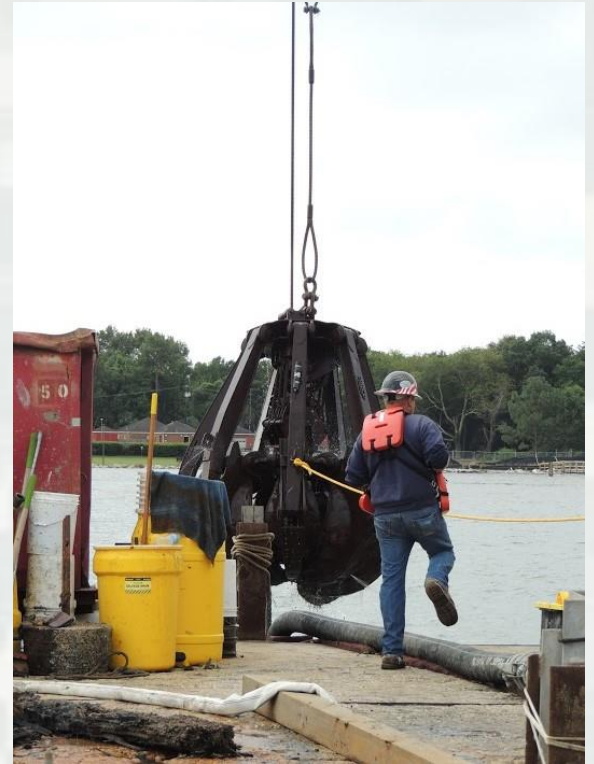


Archaeologists clearing bay



BUILDING STRONG®

Mechanized Site Clearance



Southeast casemate on deck with archaeologists measuring and tagging (Left) and railroad iron in the Grapple (Right)



BUILDING STRONG®

Mechanized Site Clearance



Examples of artifacts: Bayonet handle (Top Left), Glass Navy Bottle (Bottom Left) and Thrust Bearing (Right)

Reburial



Reburial area with Georgia shown for reference



BUILDING STRONG®

Reburial



Adding mud to reburial containers



BUILDING STRONG®

Reburial



1st container being lowered to the bottom



BUILDING STRONG®



THANK YOU



BUILDING STRONG®