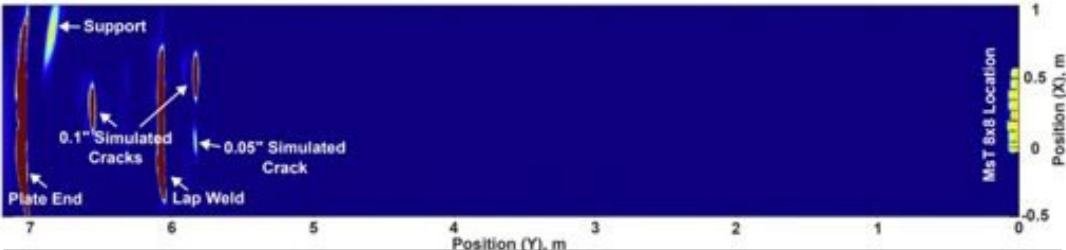


Detecting Corrosion Under Paint at a Distance

PROJECT IMAGE	OBJECTIVE
 <p data-bbox="117 601 1177 772">Example image generated using guided wave sensor array showing detection and location of damage up to 6.5 meters from the sensor in a steel plate.</p>	<p data-bbox="1202 344 2390 486">This project will evaluate guided wave sensing to determine how effective it is as a screening tool to detecting corrosion under paint from a distance in large metal plates.</p> <p data-bbox="1202 701 2125 743">TIP Item(s): 7.2.2.1.2, 7.2.2.6.5.b, 7.3.2.5.1, 7.3.2.6.1</p>
BENEFITS/ROI	PROJECT INFORMATION/FINANCIAL
<ul data-bbox="107 875 1123 1168" style="list-style-type: none"> • Assess prototype guided wave sensors for use in screening for corrosion under paint on large steel panels • Optimize speed and accuracy of inspection • Summarize cost/benefits and recommendations for immediate use 	<p data-bbox="1202 875 1722 1018">Project Lead/Team Members: Southwest Research Institute Newport News Shipbuilding</p> <p data-bbox="1202 1075 1577 1118"><u>Duration:</u> 12 Months</p> <p data-bbox="1202 1175 1595 1318">Program Funds: \$200k Cost Share: \$0 Public Sector: \$0</p>

Detecting Corrosion Under Paint at a Distance

- Detecting corrosion under paint is extremely challenging but crucial for maintenance. Guided wave sensors can detect corrosion under paint from a distance, allowing paint to remain in place during inspection.
- This project will:
 - Evaluate sensing method in common shipyard cases to determine viability as a screening tool.
 - Quantify the sensors' ability to detect anomalies to prove their reliability.
 - Increase the efficiency of inspecting large steel plate structures by screening for anomalies to guide the inspection process.