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PURPLE FIRE VULNERABILITY/LETHALITY ASSESSMENT TOOL

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SUMMARY

Survivability management is a well-established part of naval procurement. Timely and accurate advice requires efficient assessment software backed up by expert users. This paper introduces Survivability Consulting Limited's (SCL's) Purple Fire tool, which contains unique and novel features designed to facilitate the assessments required for modern platform designs, weapon programmes and operational analysis. The tool gives analysts the ability to construct platform representations very quickly, meaning less model build time and more analysis time. It automates the consideration of large parameter spaces, allowing in-depth assessments to be conducted more rapidly than ever. A link to the University of Greenwich's maritime EXODUS is used to simulate the movement of crew through a vessel, including abandonment of the platform. The new 'criticality assessment' offers a threat-independent assessment of the quality of redundancy in a design. Case studies of the first uses of the tool are presented and the development pipeline explored.