



Ship Structure Committee

Focus Areas For 2018 Project Idea Solicitation

Focus Area	Examples
I. Structural Lifetime Extension (Aging ships and hull longevity)	Corrosion monitoring, assessment, inspection Instrumentation for structural health monitoring system; data analysis methods Inspection techniques for minor structure, e.g. watertight doors, ventilation ducts, and hatches
II. Arctic Construction, Operations, Technologies and Effects (Construction / Operations)	Structural materials for polar operation, with respect to strength and temperature Design: efficient ice strengthening Structural design compliance with Polar Code
III. Composite Materials	Weight loss versus fatigue failure; optimization guidelines Effect of manufacturing variances on different failure modes Residual strength of composite structures post fire/collision
IV. SSC Follow-Up Report	Follow-on report to existing, outdated SSC report

To submit a research idea, please use the template available on the Ship Structure Committee website, www.shipstructure.org, and email to LT Jonathan Duffett, Jonathan.B.Duffett@uscg.mil.