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Stress Management in TAMU3, a 14 Tesla Nb₃Sn Dipole¹ ED-DIE HOLIK III, CHRISTOPHER BENSON, NICK DIACZENKO, TIM ELLIOTT, RAY GARRISON, ANDREW JAISLE, ALFRED MCINTURFF, PETER MCIN-TYRE, DIOR SATTAROV — The Accelerator Research Laboratory at Texas A&M University is constructing TAMU3, a model dipole which implements Stress Management within its windings to prevent strain degradation of advanced superconductors under large Lorentz forces. A pier-and-beam support structure is integrated within the windings to intercept Lorentz stress from the inner windings and bypass it around the outer windings. TAMU3 will be the first rendering into practice of Stress Management and may open the way to fields of 16 Tesla and beyond for future hadron colliders, muon colliders, and other applications.

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