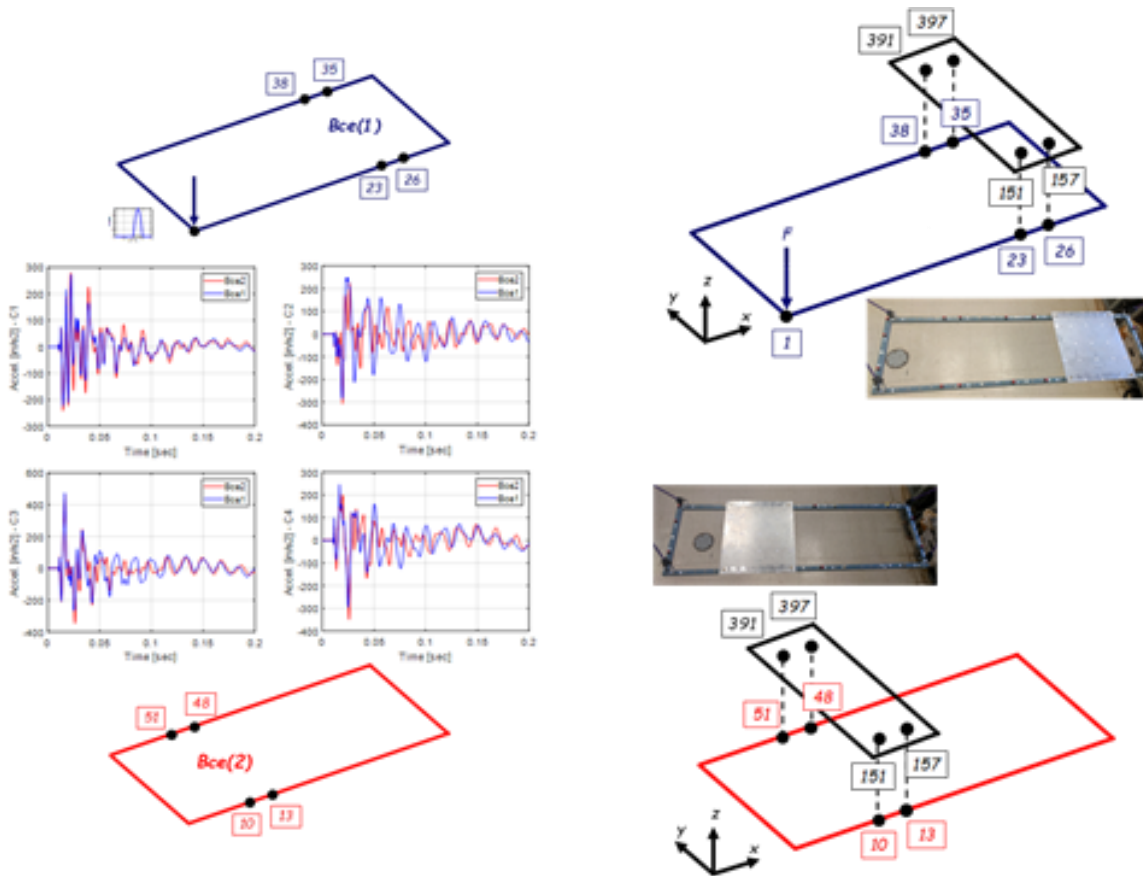


## FINE - Analytical Frame Plate Demonstrations



Work has been performed to further implement fixture neutralization (FINE) methods defined in previous research entitled “Adjustment of Input Excitation to Account for Fixture-Test Article Coupling Effects”. For this work, a rectangular steel frame structure with bending and torsion modes will be used with an attached upper structure (used to simulate a device under test). The upper structure will be attached at different locations on the main frame which will provide the dynamic interaction often seen in vibration tests; without any adjustment to the test signal, then the DUT will experience different responses which distorts the true purpose of the test. The work herein is a proof of concept to demonstrate the typical dynamic fixture interaction that occurs in many vibration tests and adjustments to the input excitation to neutralize the test fixture dynamics. This analytical work which demonstrates the methodology is currently being deployed on an experimental configuration.