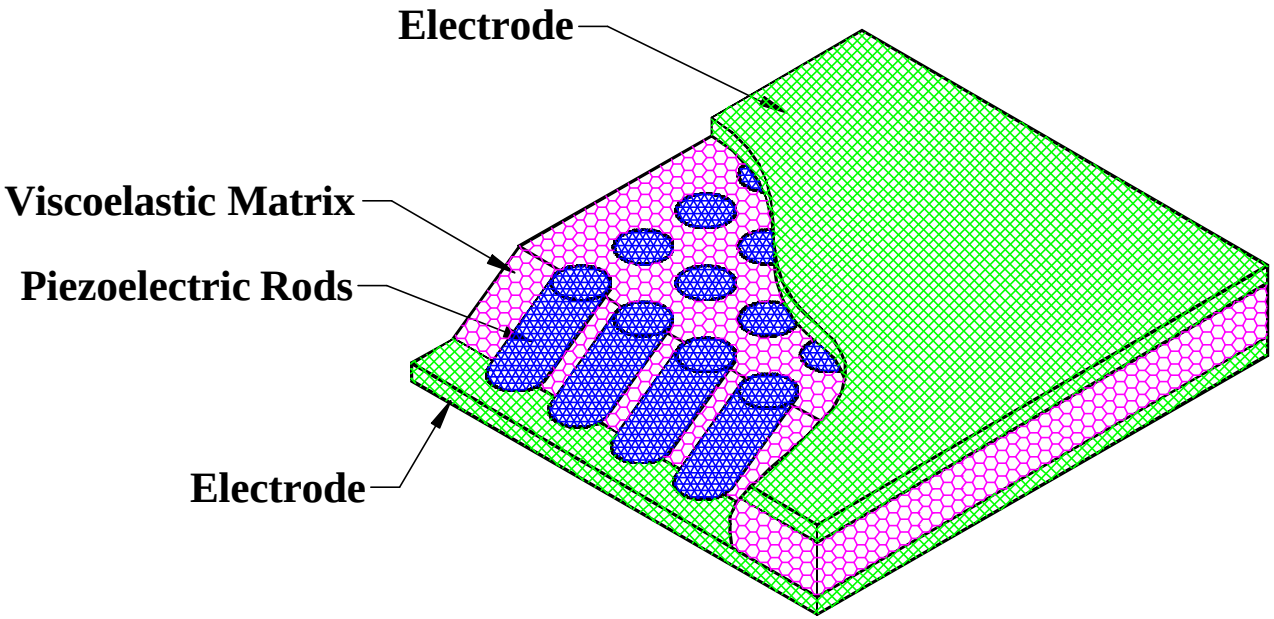
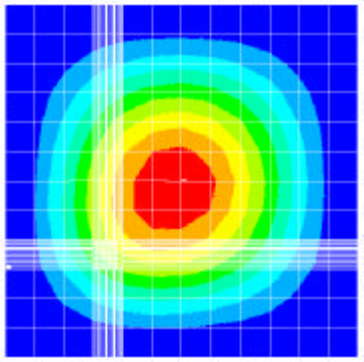
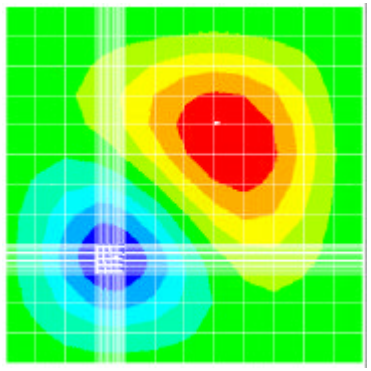
ACTIVE PIEZOELECTRIC DAMPING COMPOSITES



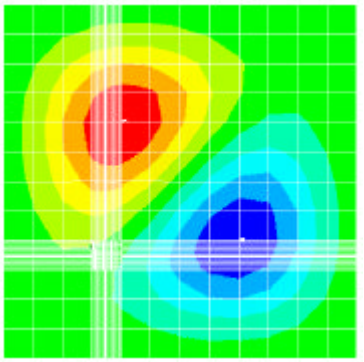
ACTIVE PIEZOELECTRIC DAMPING COMPOSITES



Mode 1



Mode 2



Mode 3

COMPARISON BETWEEN THEORY & EXPERIMENT

	Without Coupling			With Coupling		
Modes	1st	2nd	3rd	1st	2nd	3rd
Theory (Hz)	35.7	62.8	78.3	50.1	63.4	76.0
Exp. (Hz)	32.0	65.5	78.0	54.5	66.0	78.5

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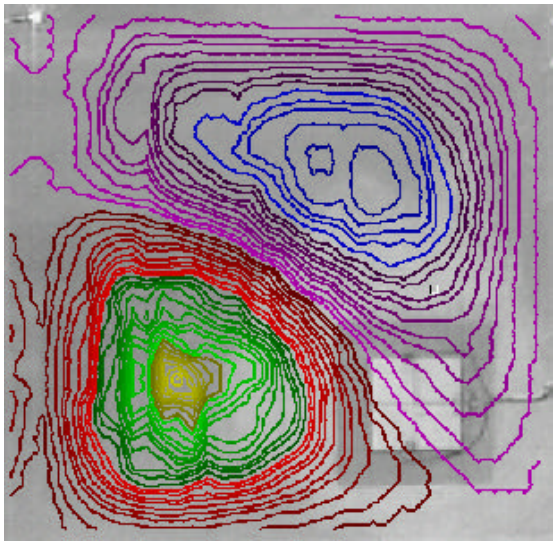
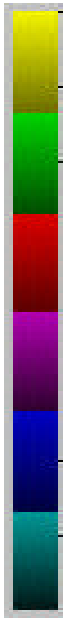
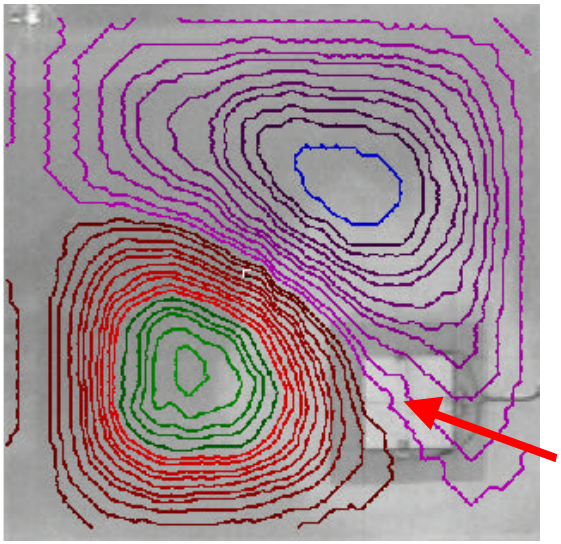
ACTIVE PIEZOELECTRIC DAMPING COMPOSITES





mm/s



UNCONTROLLED

CONTROLLED

THIRD COUPLED MODE (78.5 Hz) with MICROPHONE FEEDBACK

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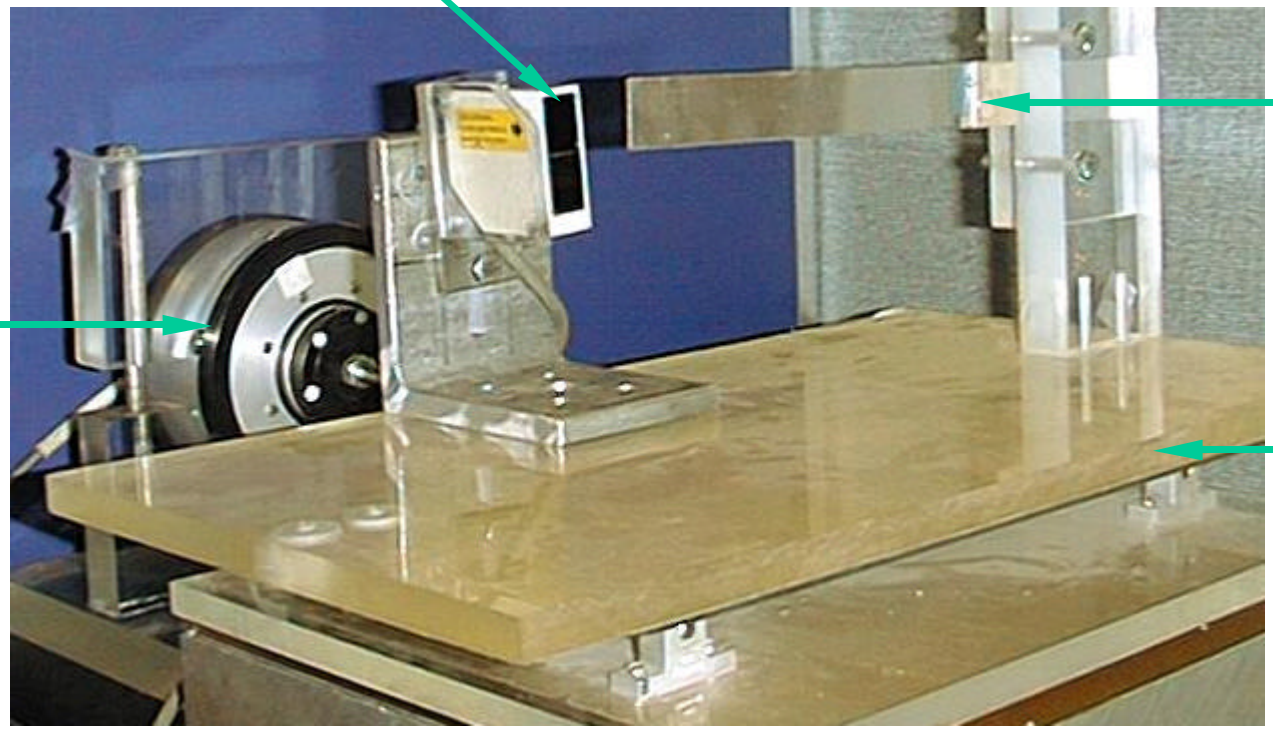
ACTIVE PIEZOELECTRIC DAMPING COMPOSITES



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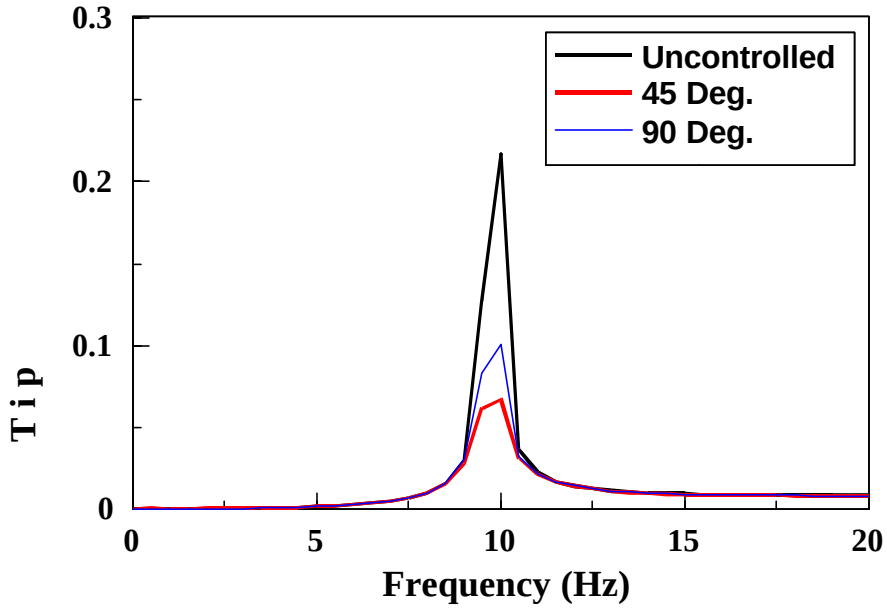
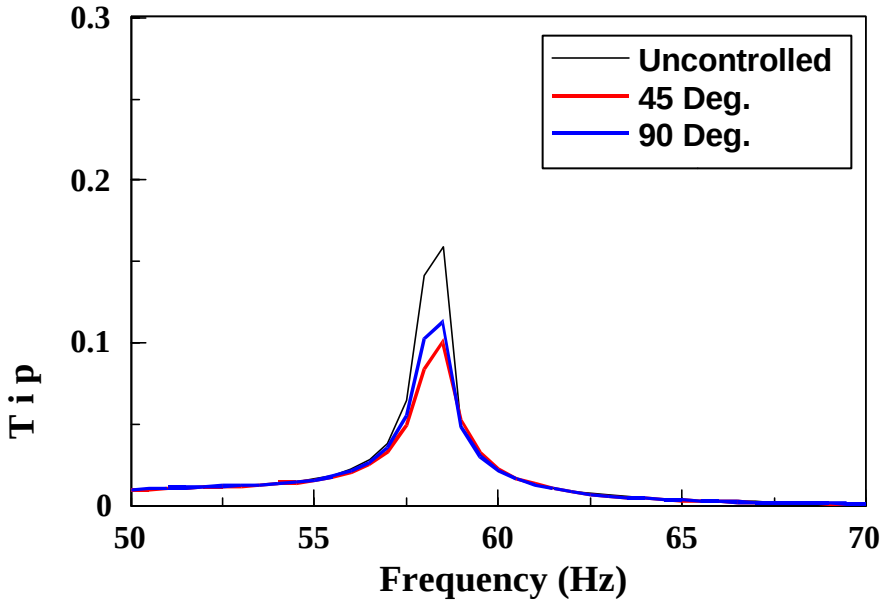
ACTIVE PIEZOELECTRIC DAMPING COMPOSITES

First Mode



Second Mode



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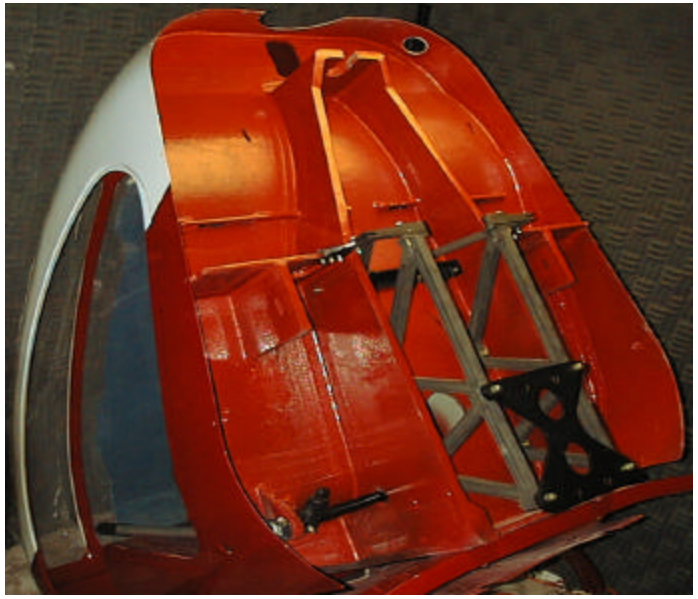
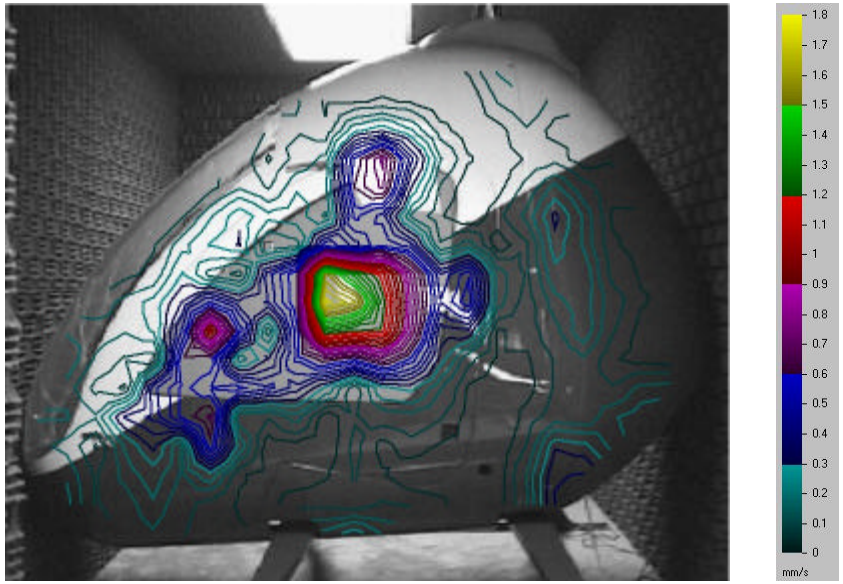
ACTIVE PIEZOELECTRIC DAMPING COMPOSITES

Helicopter Cabin



Vibration Contours of Door



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