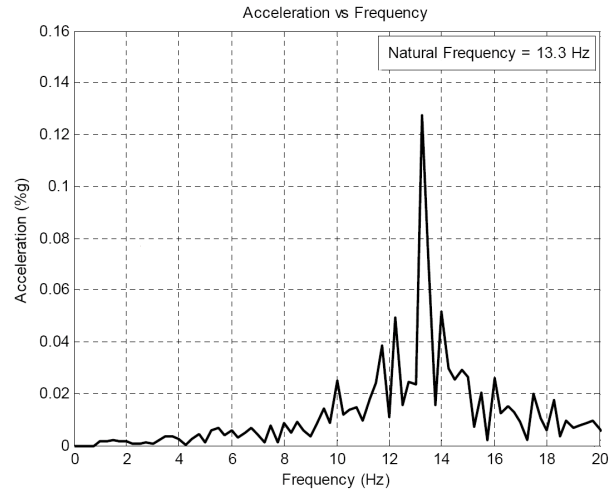
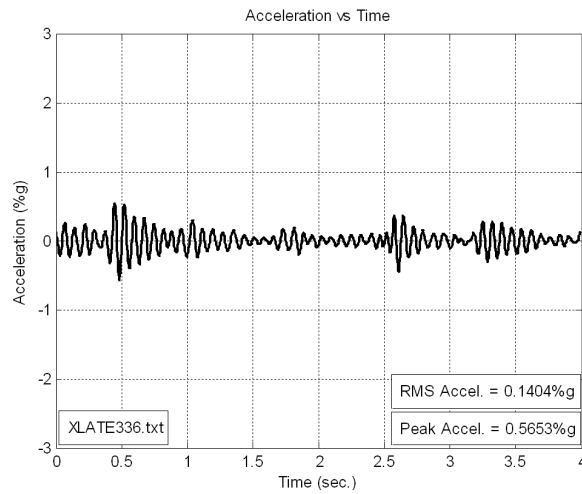


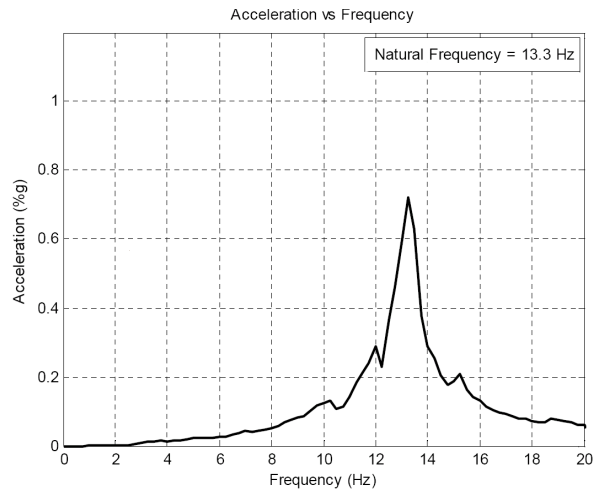
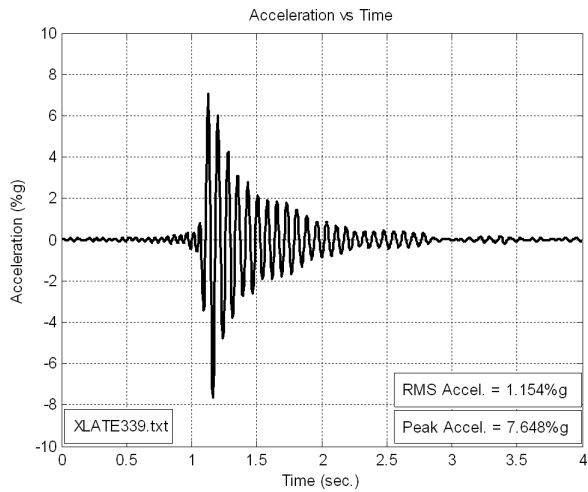
APPENDIX A

ACCELERATION TRACES AND FREQUENCY SPECTRA OF THE IN-SITU TESTS

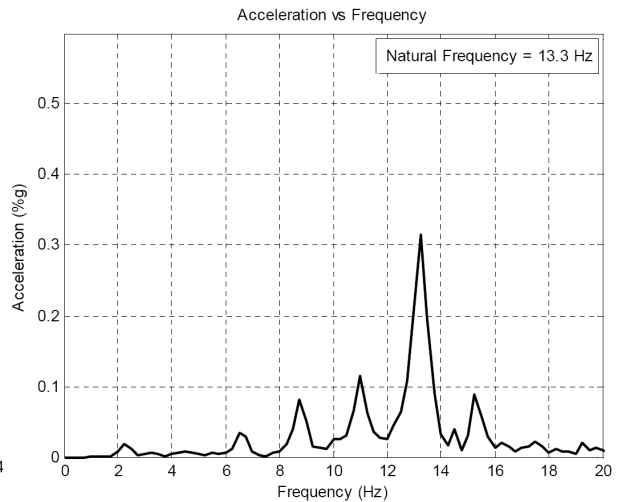
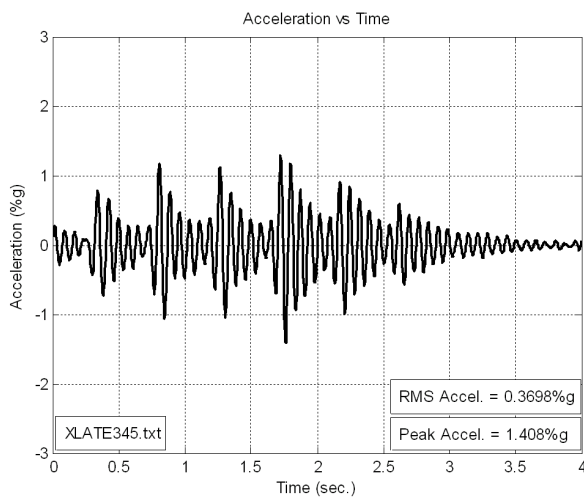
A.1 Bay 1, Hampton Inn:



a) Ambient Vibrations

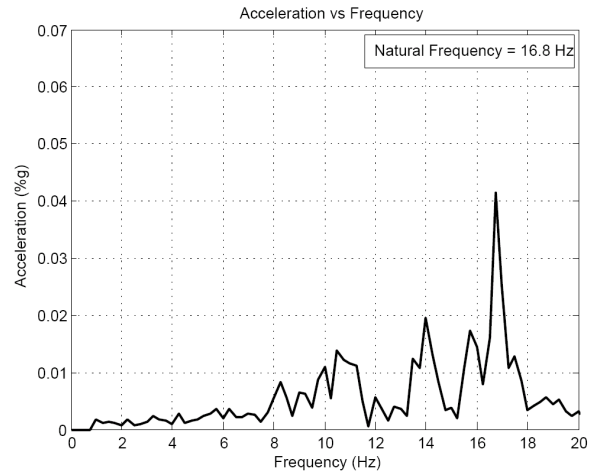
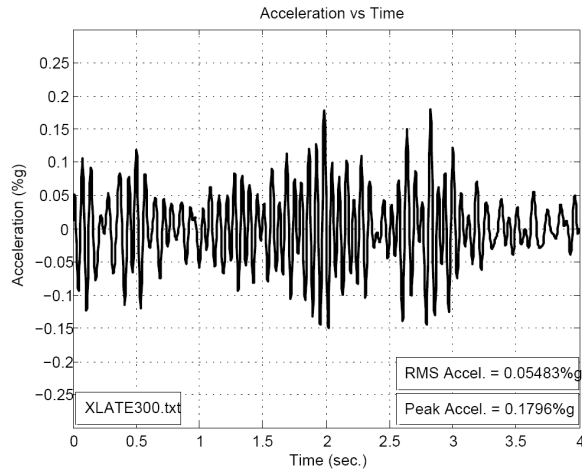


b) Heel-Drop

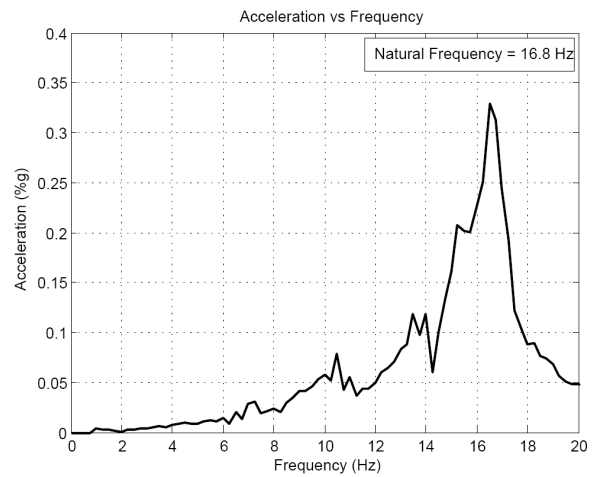
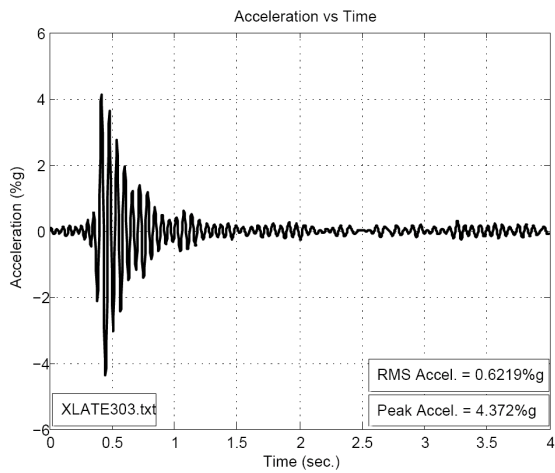


c) Walking at 133 bpm (2.22 Hz)

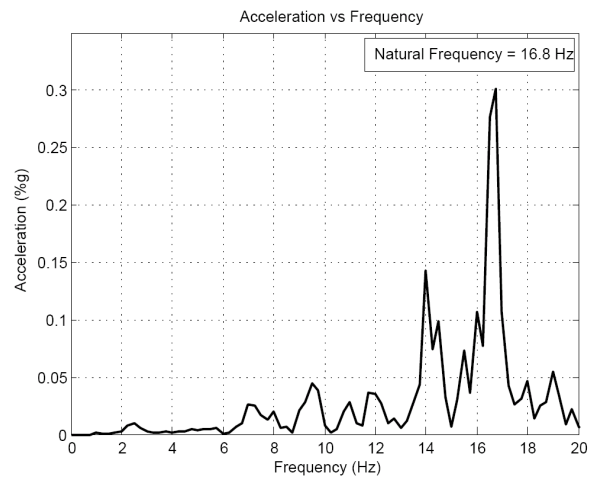
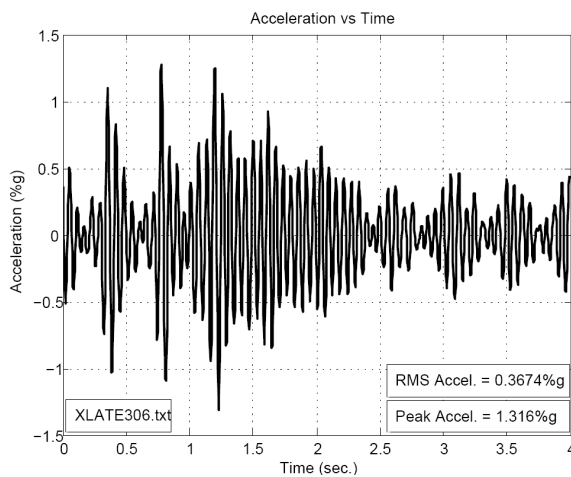
A.2 Bay 2, Hampton Inn:



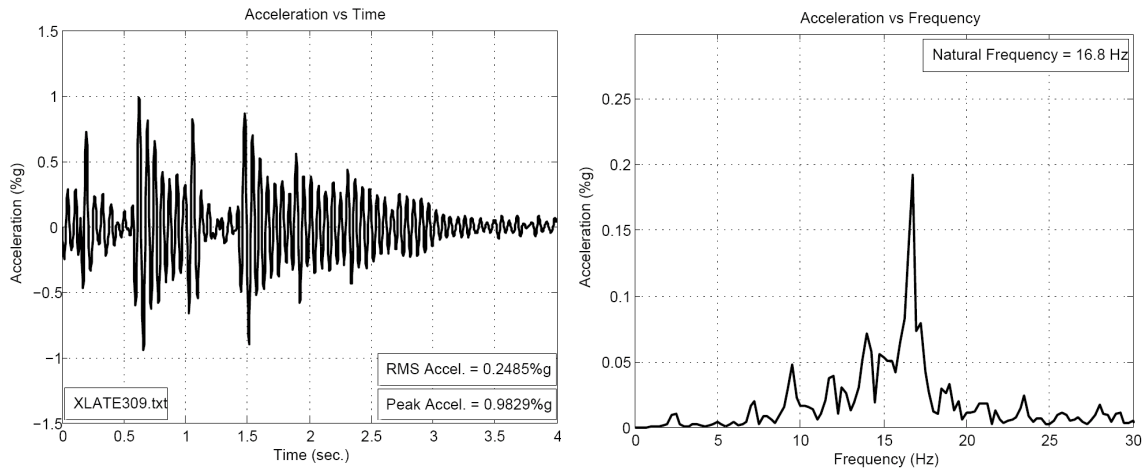
a) Ambient Vibrations



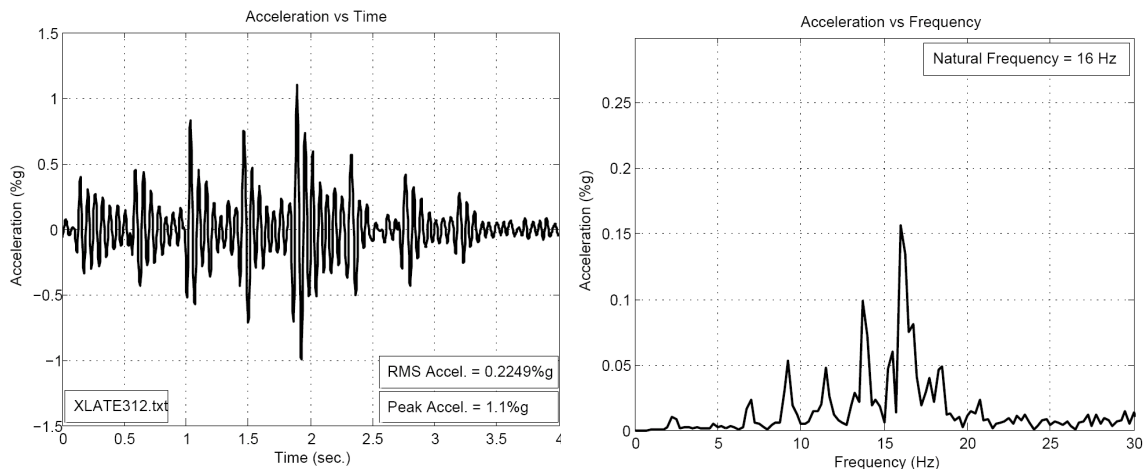
b) Heel-Drop



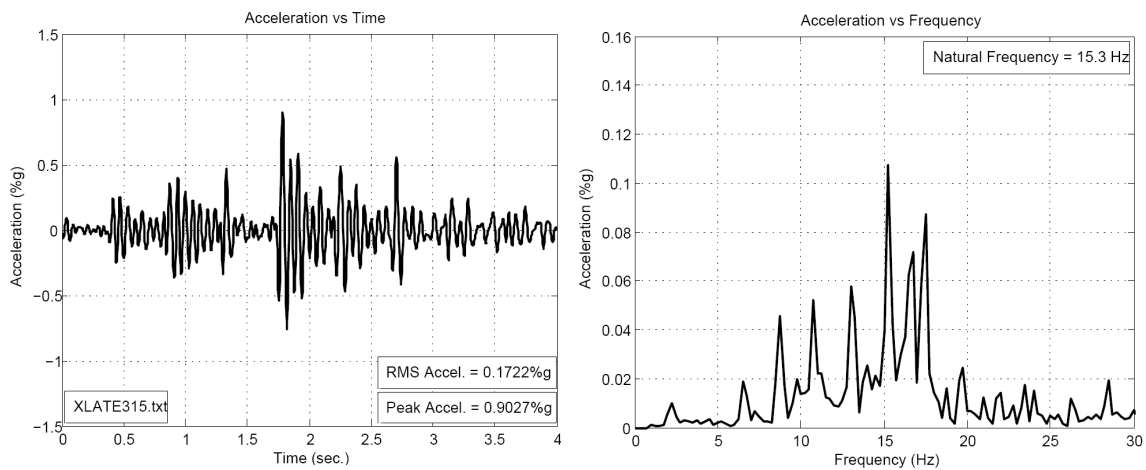
c) Walking at 144 bpm (2.40 Hz)



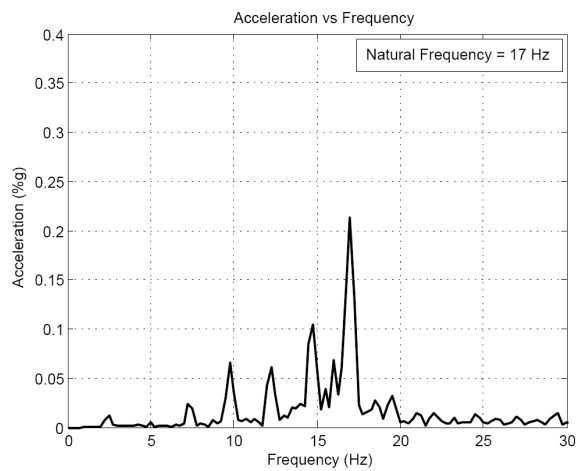
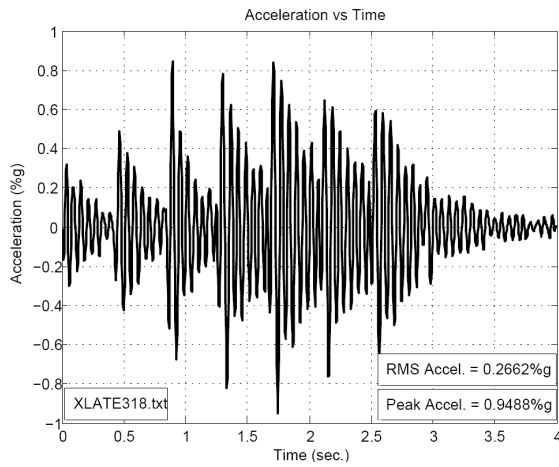
d) Walking at 144 bpm (2.40 Hz)



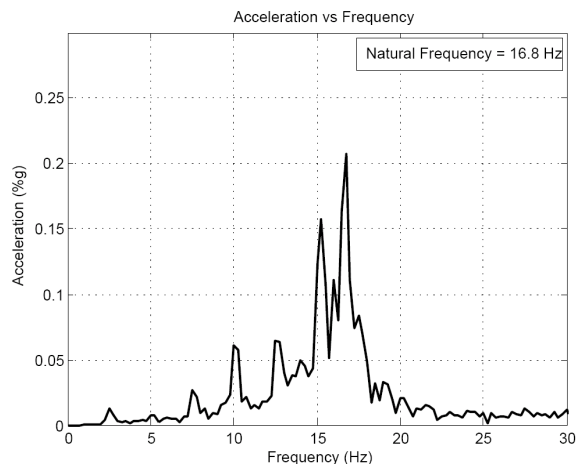
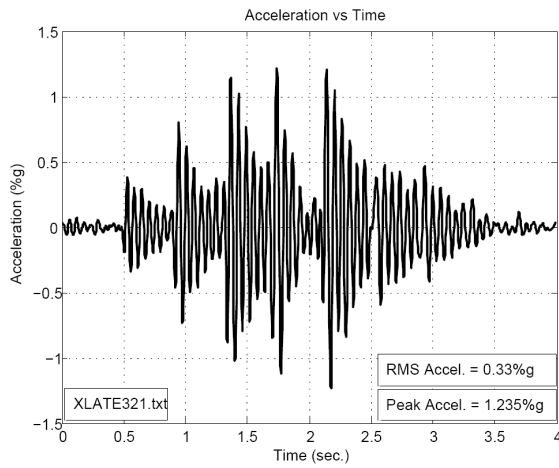
e) Walking at 140 bpm (2.33 Hz)



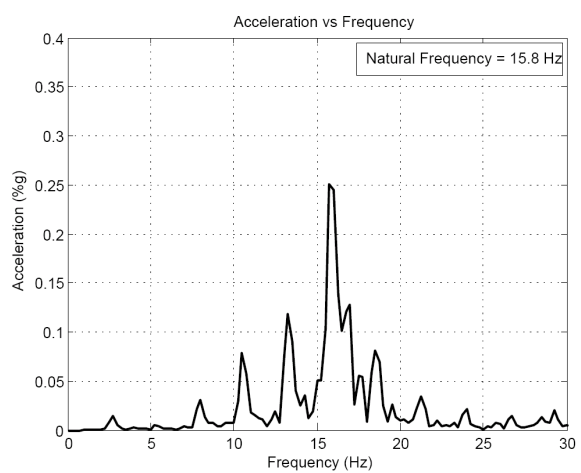
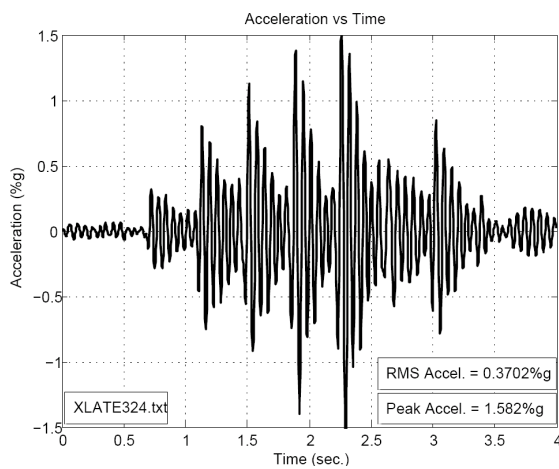
f) Walking at 135 bpm (2.25 Hz)



g) Walking at 150 bpm (2.50 Hz)

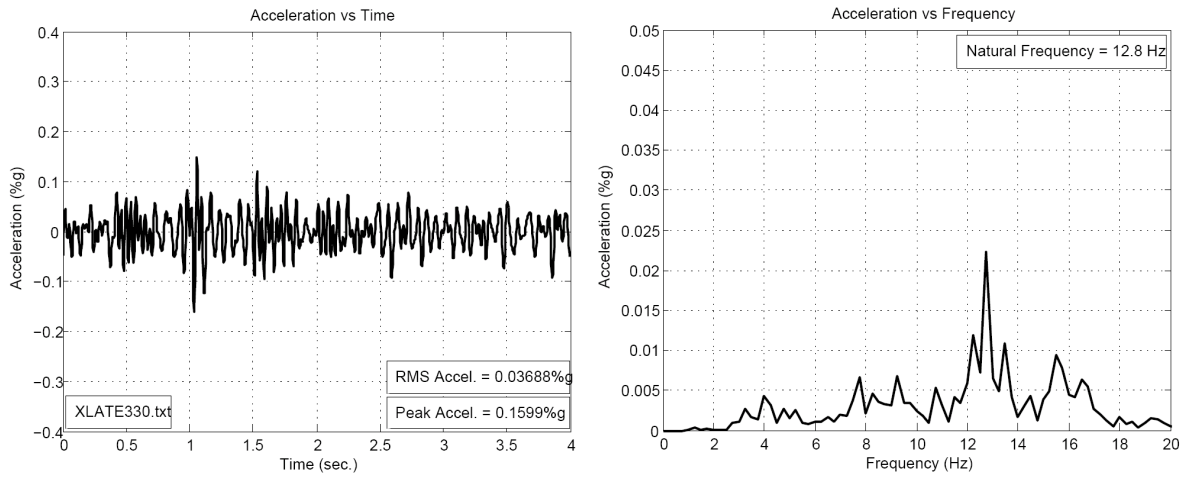


h) Walking at 155 bpm (2.53 Hz)

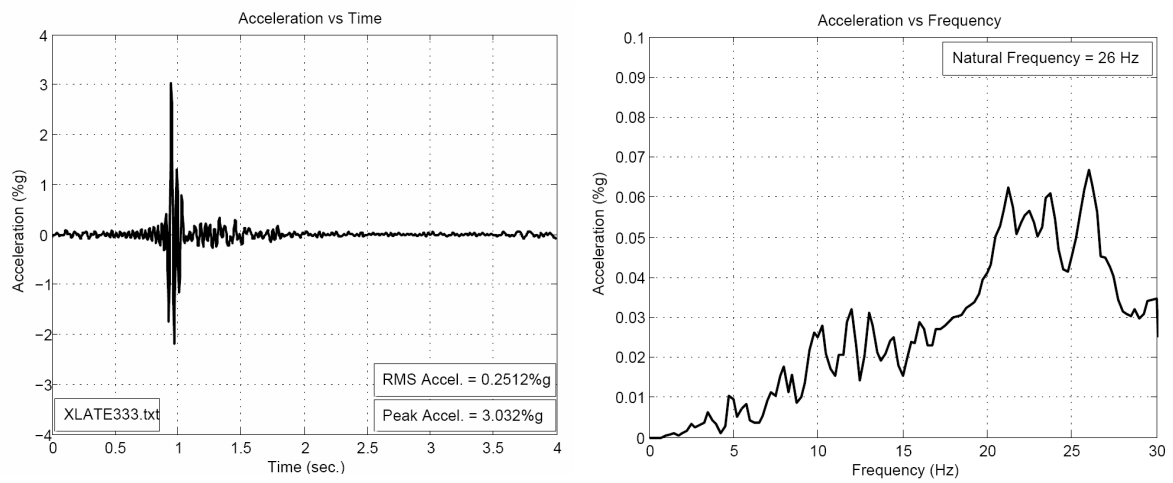


g) Walking at 168 bpm (2.60 Hz)

A.3 Bay 3, Hampton Inn:

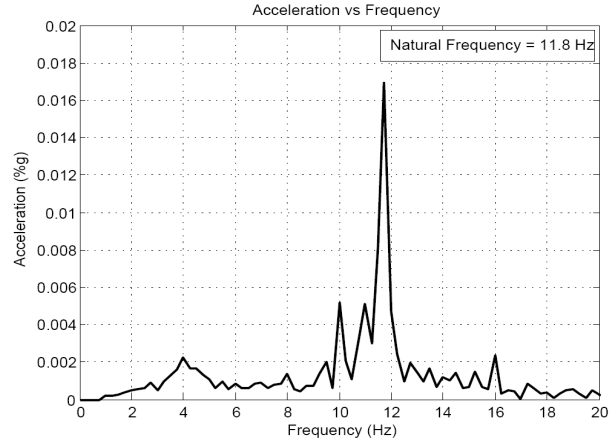
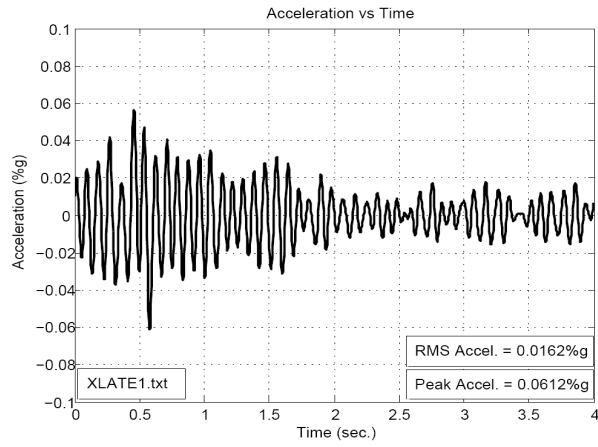


a) Ambient Vibrations

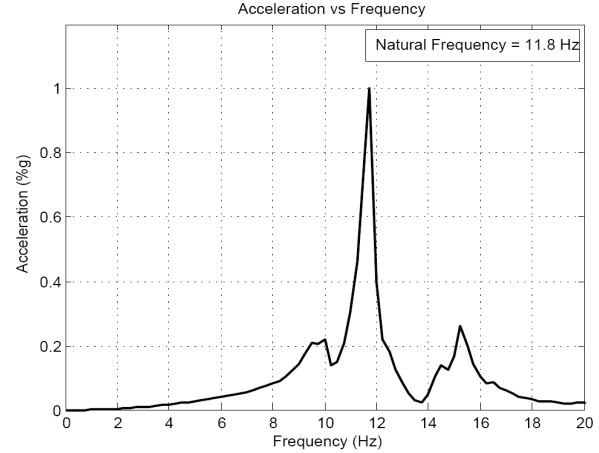
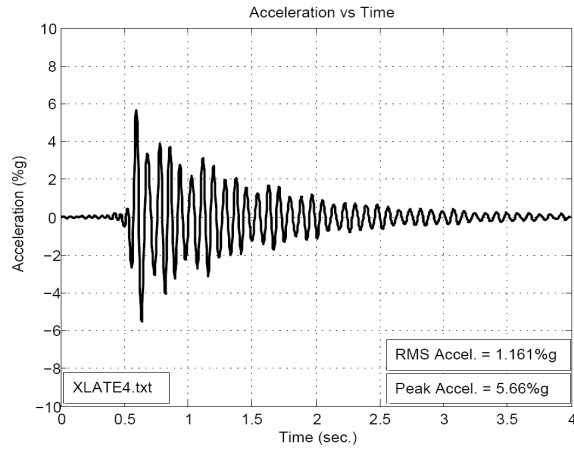


b) Heel-Drop

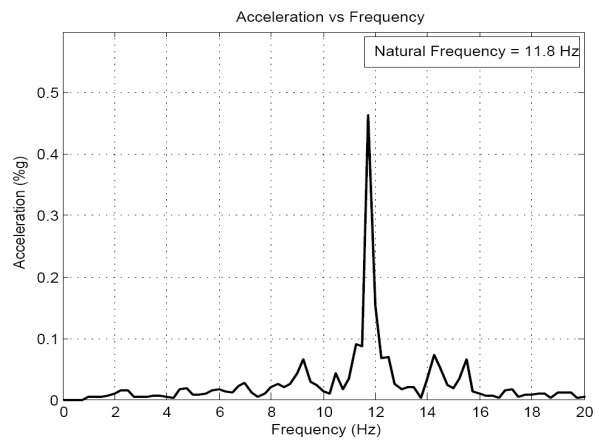
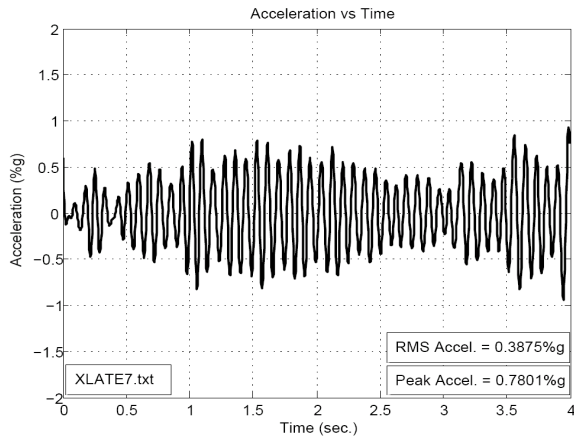
A.4 Bay 4, Caribe Cove:



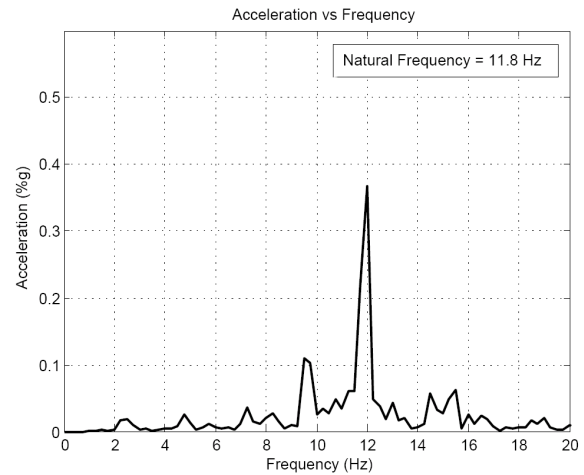
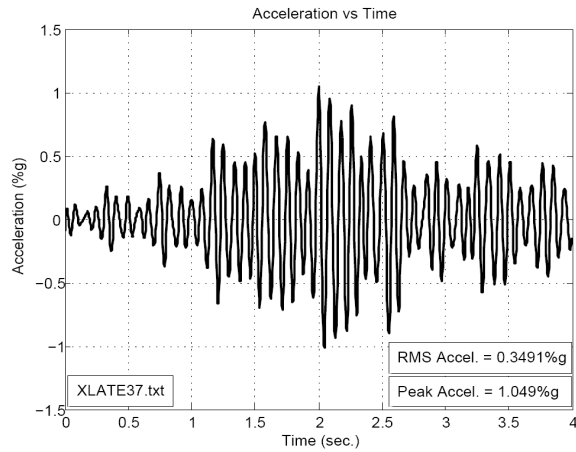
a) Ambient Vibrations



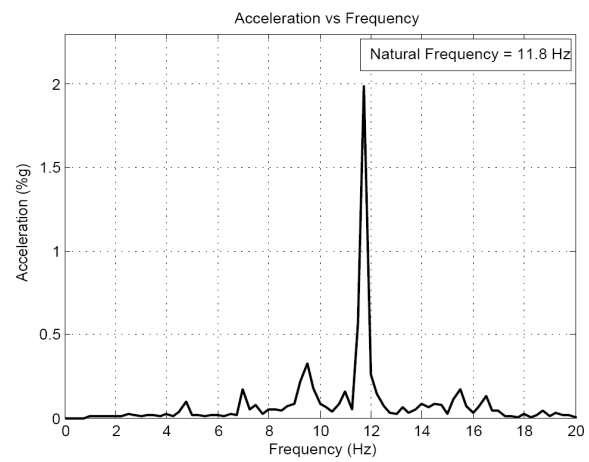
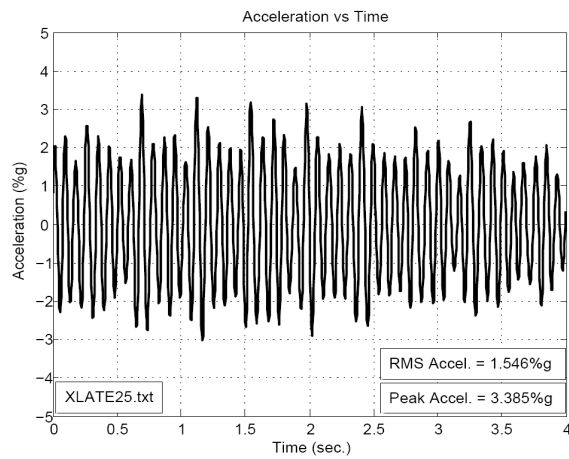
b) Heel-Drop Excitation



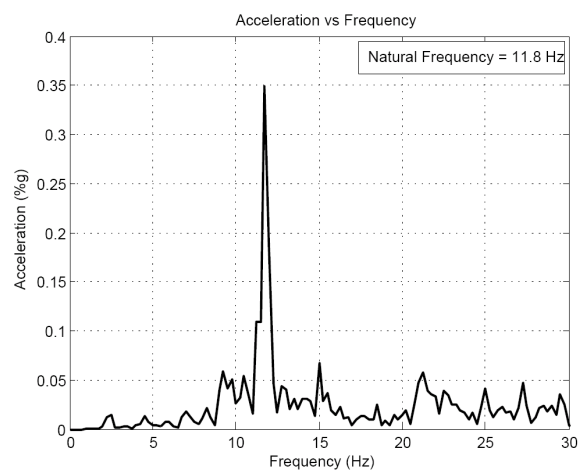
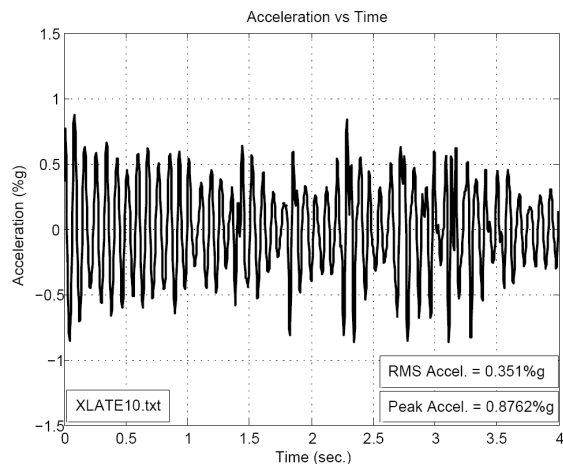
c) Walking Parallel at 141 bpm (2.35 Hz)



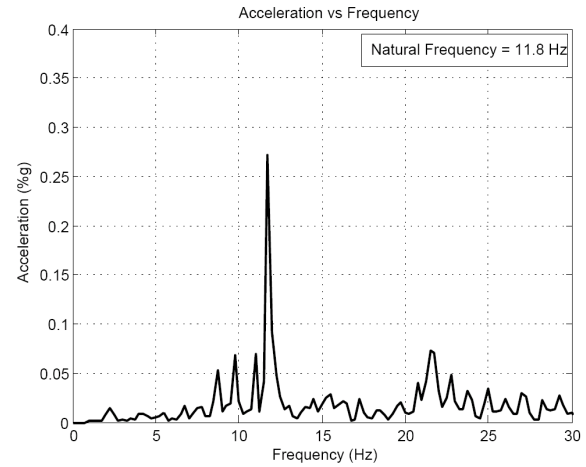
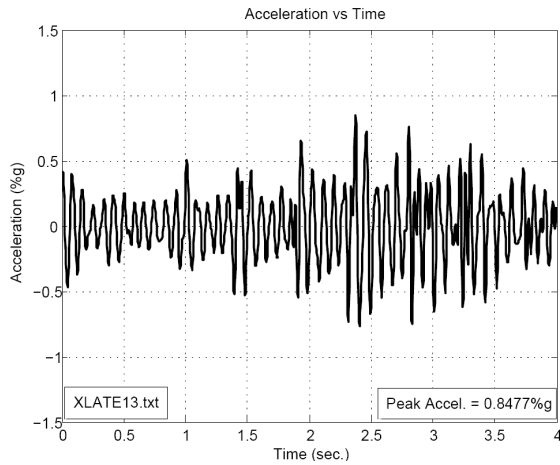
d) Walking Perpendicular at 141 bpm (2.35 Hz)



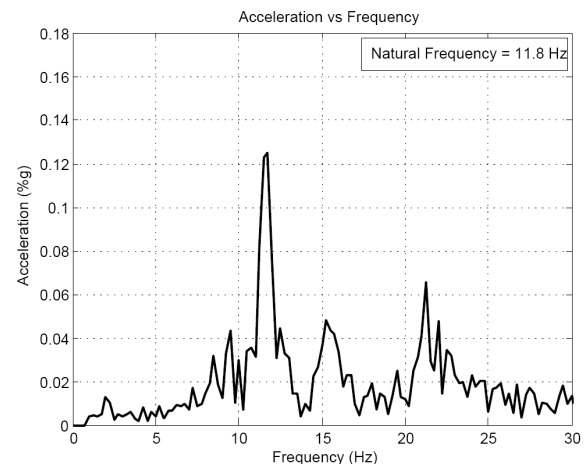
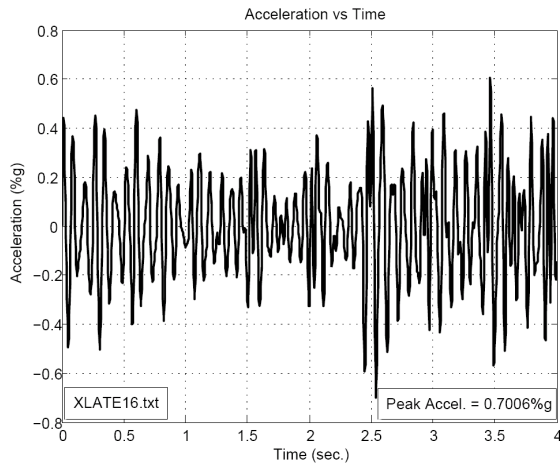
e) Bouncing at 141 bpm (2.35 Hz)



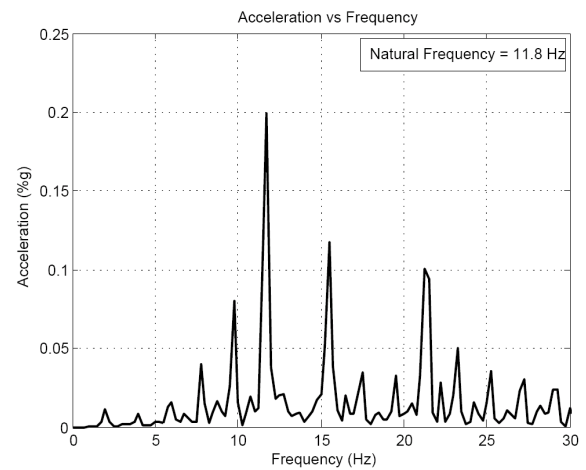
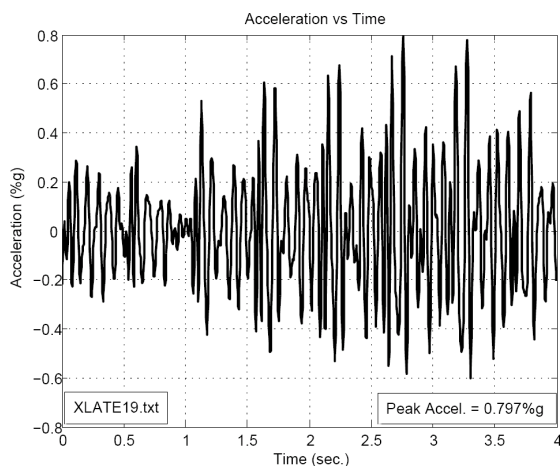
f) Walking Parallel at 141 bpm (2.35 Hz)



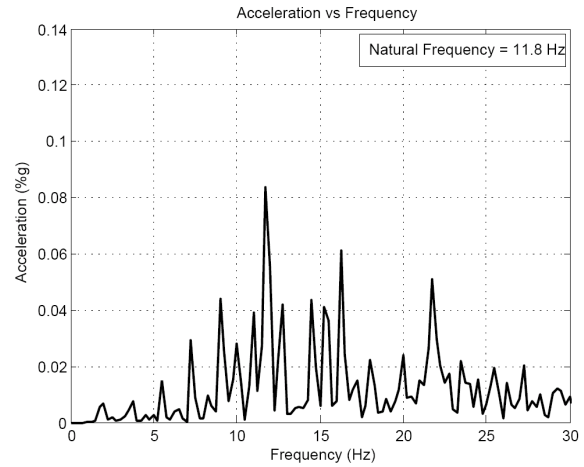
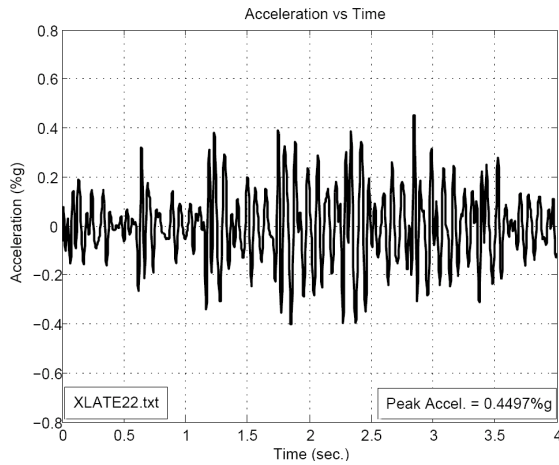
g) Walking Parallel at 131 bpm (2.18 Hz)



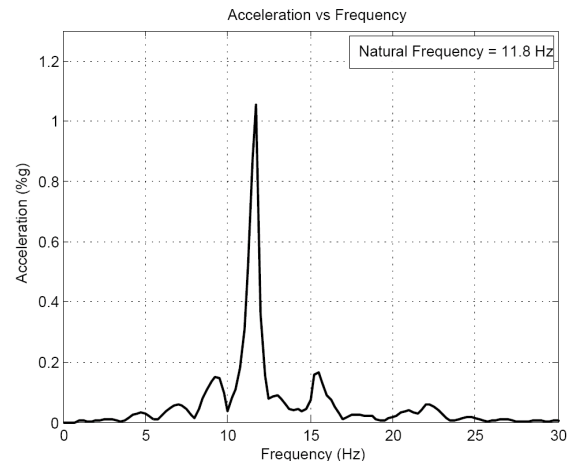
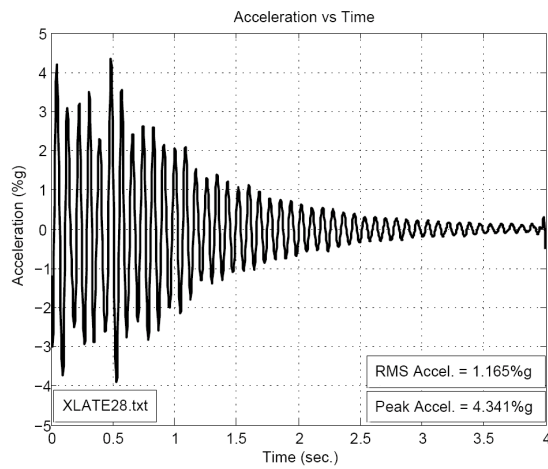
h) Walking Parallel at 125 bpm (2.08 Hz)



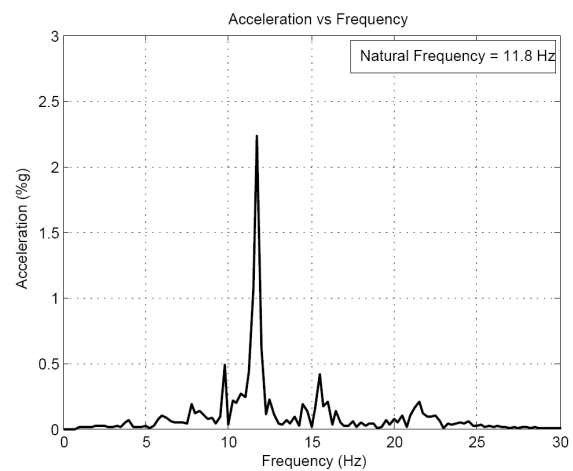
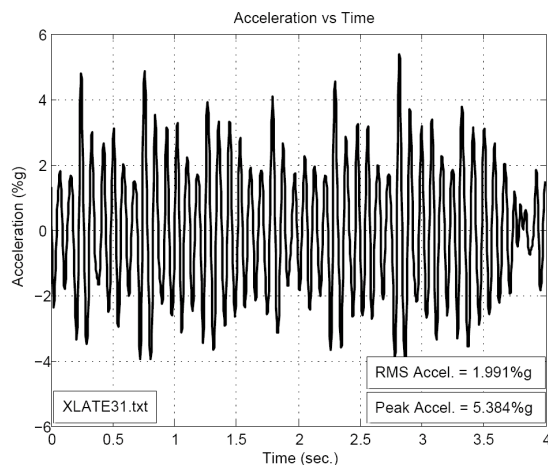
i) Walking Parallel at 117 bpm (1.96 Hz)



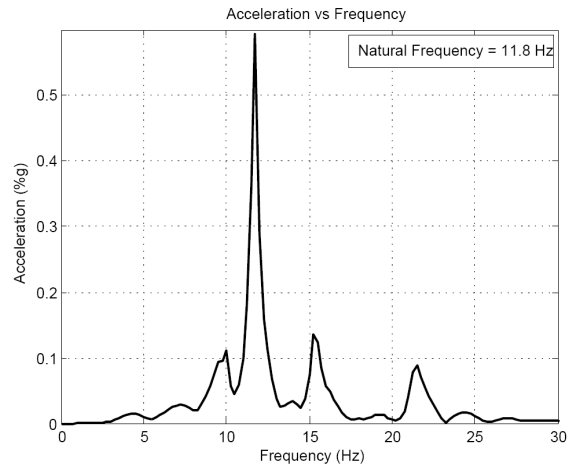
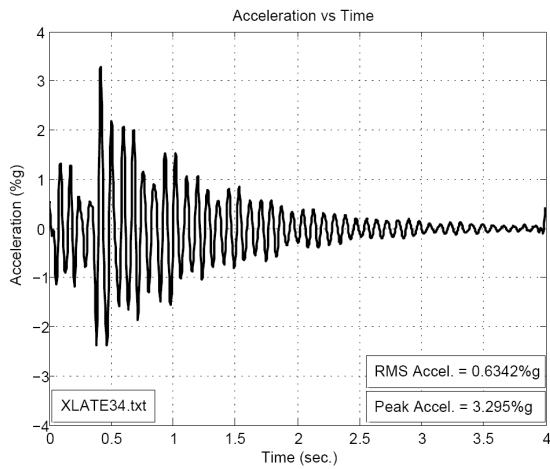
j) Walking Parallel at 110 bpm (1.83 Hz)



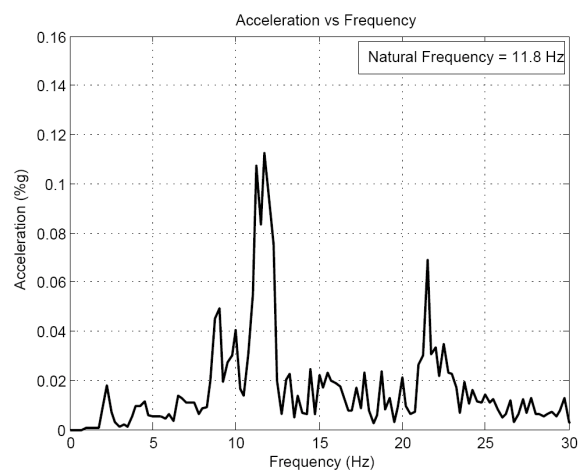
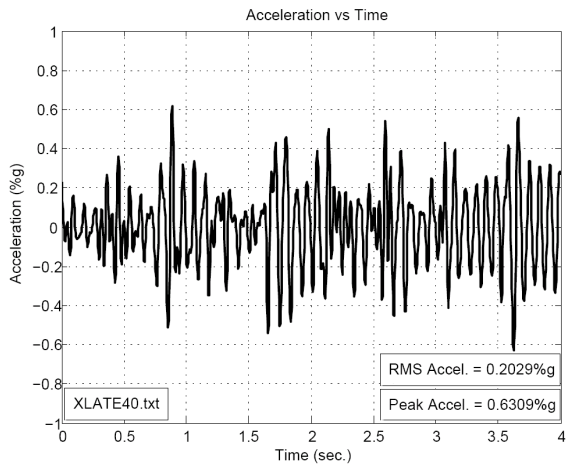
k) Decay



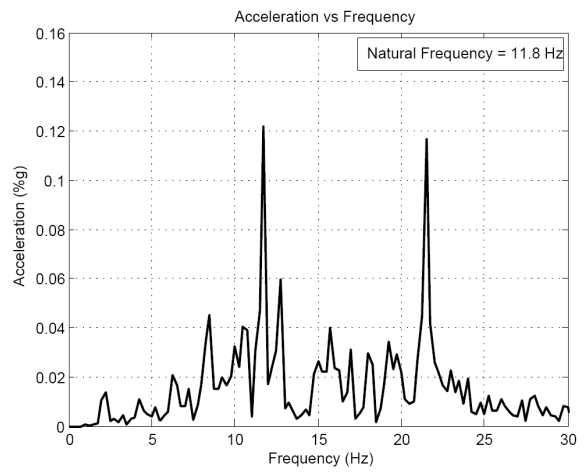
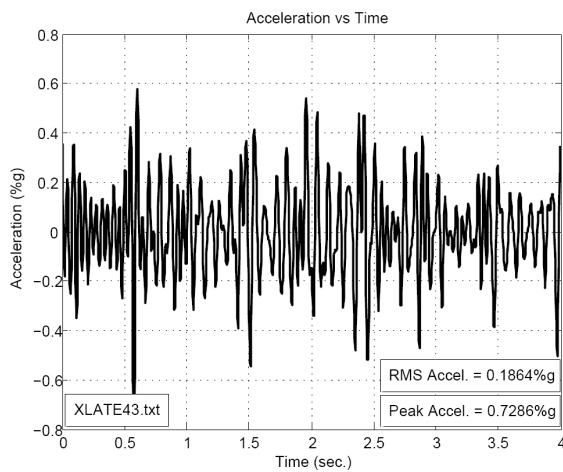
l) Bouncing at 117 bpm (1.96 Hz)



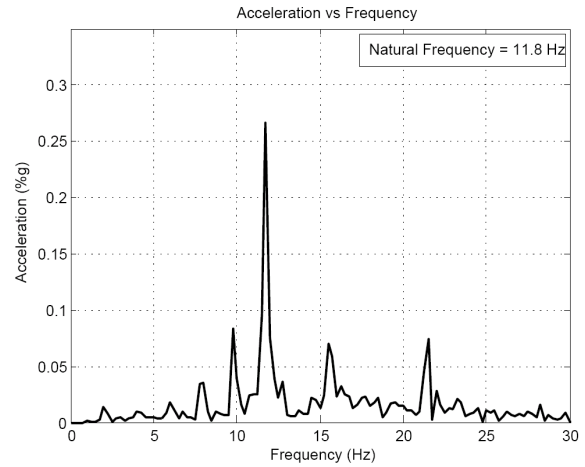
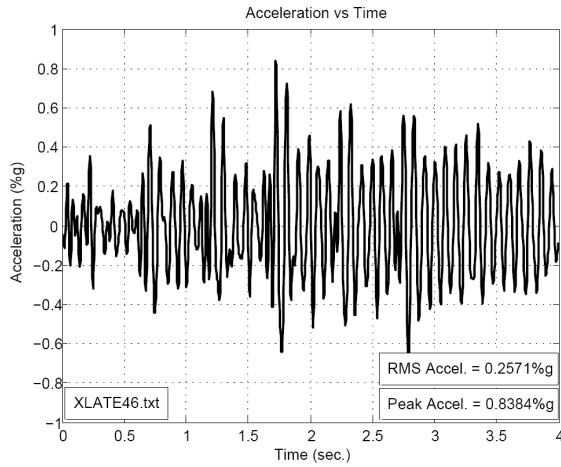
m) Decay



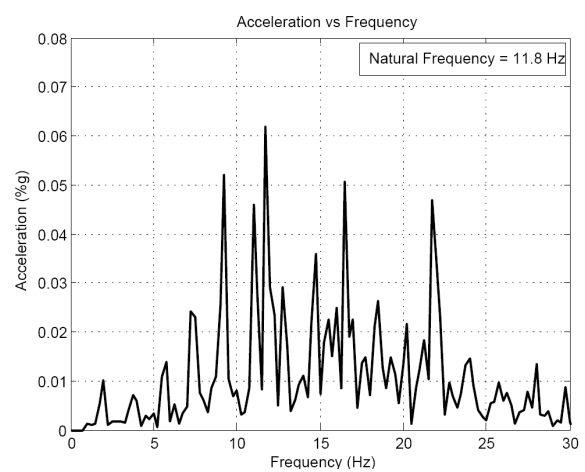
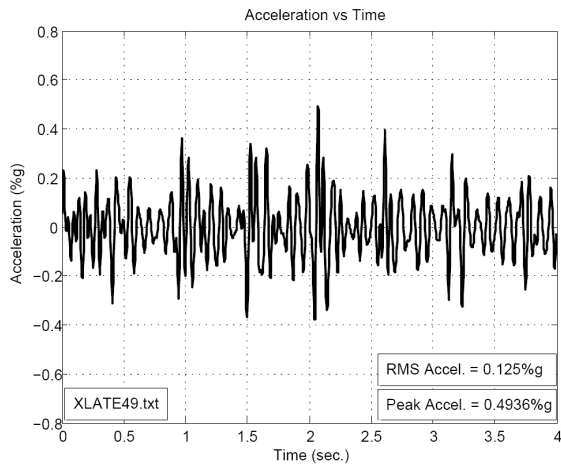
n) Walking Perpendicular at 131 bpm (2.18 Hz)



o) Walking Perpendicular at 125 bpm (2.08 Hz)

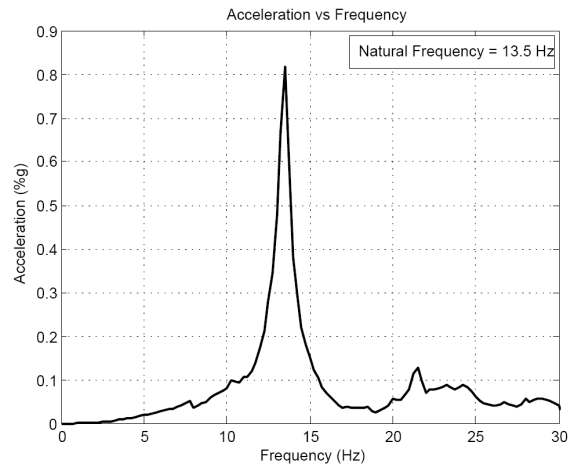
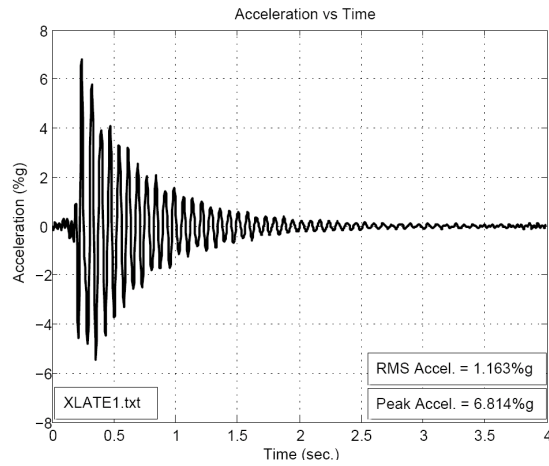


p) Walking Perpendicular at 117 bpm (1.96 Hz)

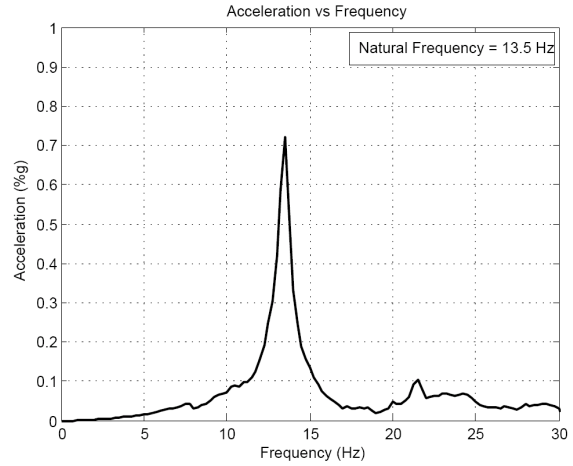
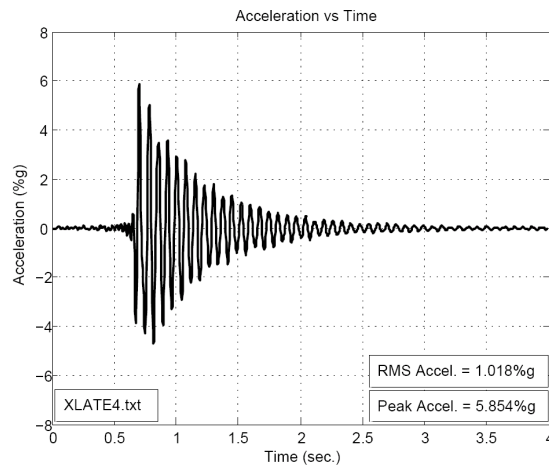


q) Walking Perpendicular at 110 bpm (1.83 Hz)

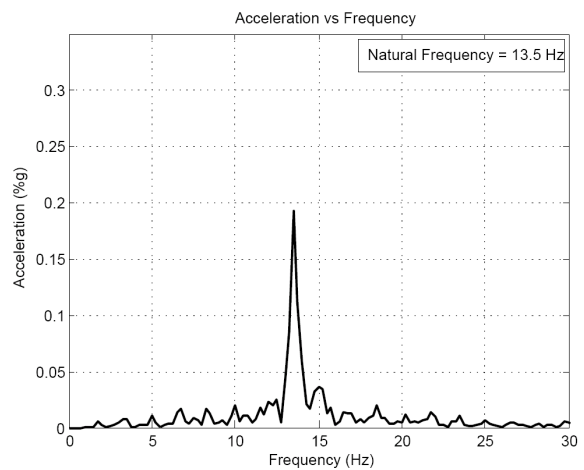
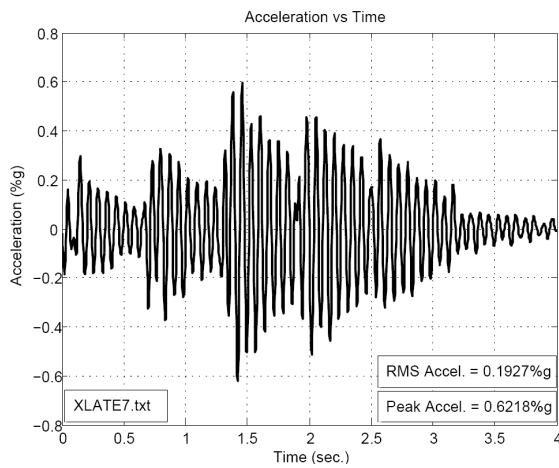
A.5 Bay 5, Concord and Cumberland:



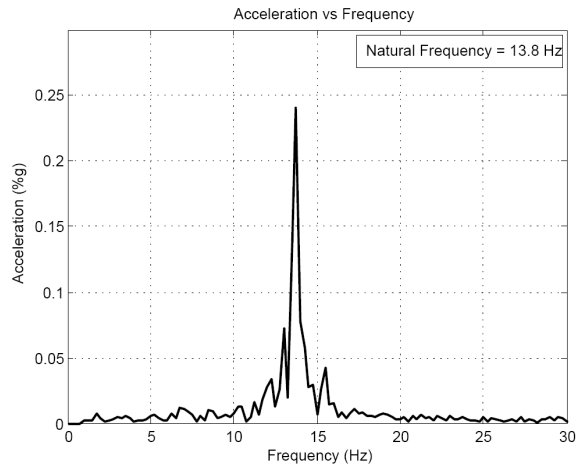
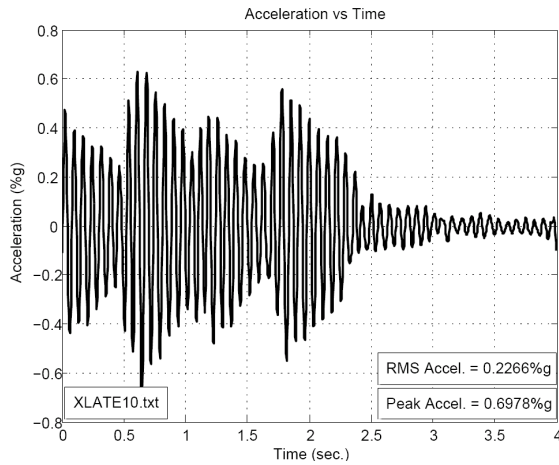
a) Heel-Drop



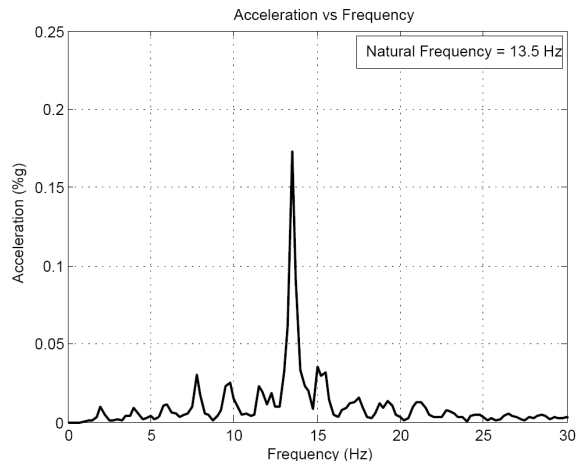
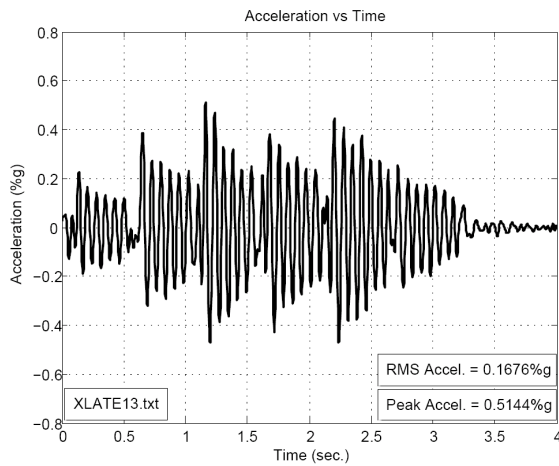
b) Heel-Drop



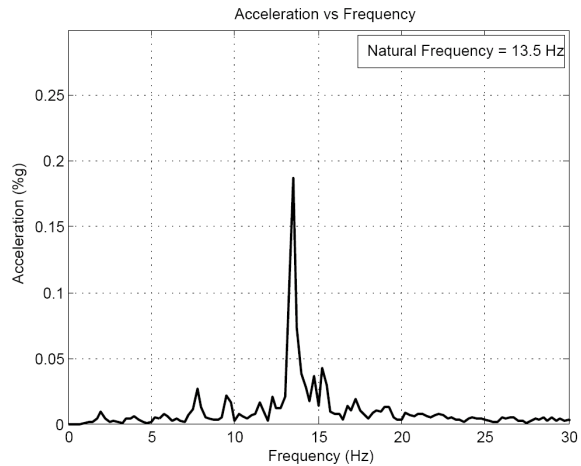
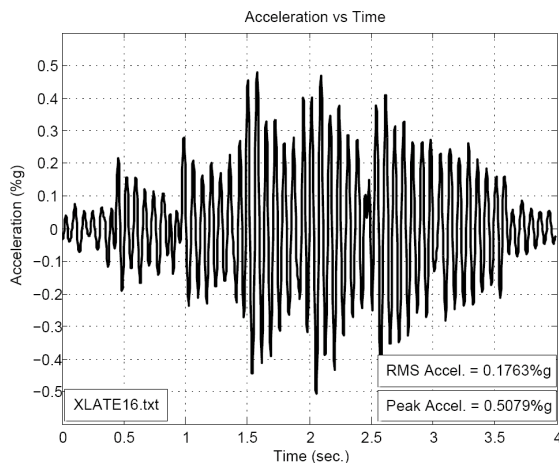
c) Walking Parallel at 101 bpm (1.68 Hz)



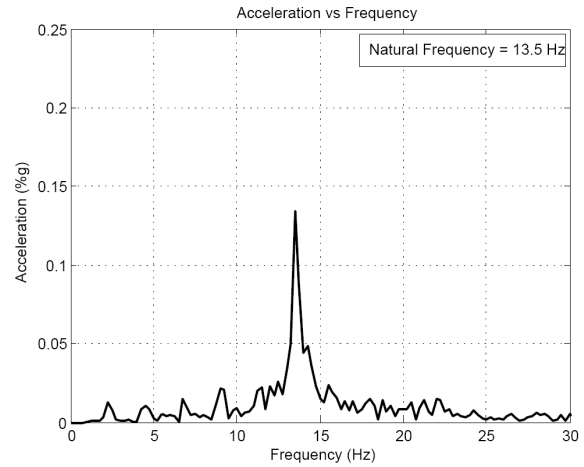
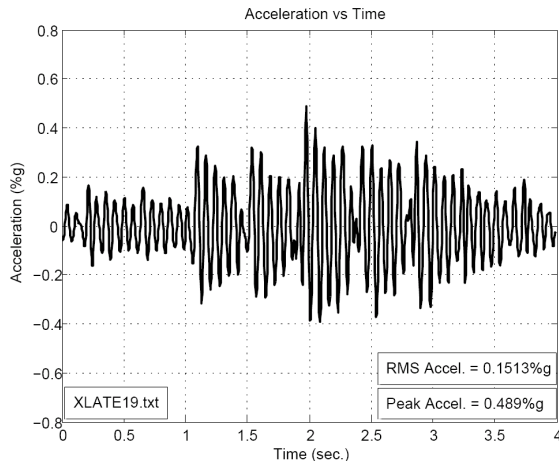
d) Walking Parallel at 101 bpm (1.68 Hz)



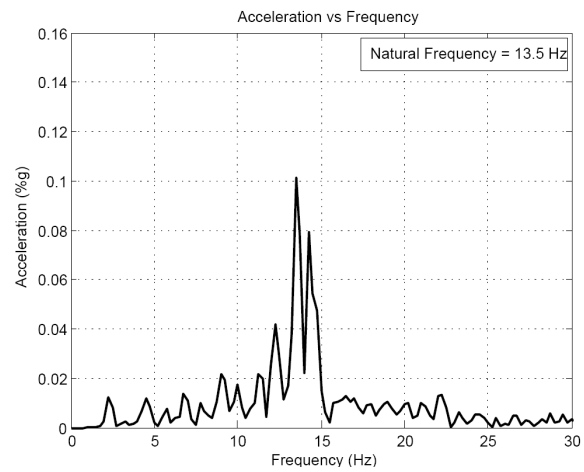
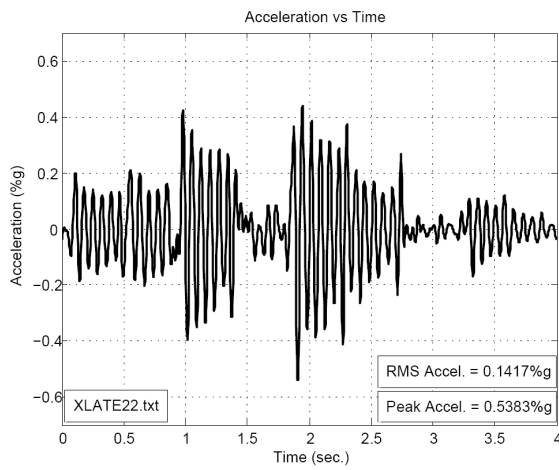
e) Walking Parallel at 116 bpm (1.93 Hz)



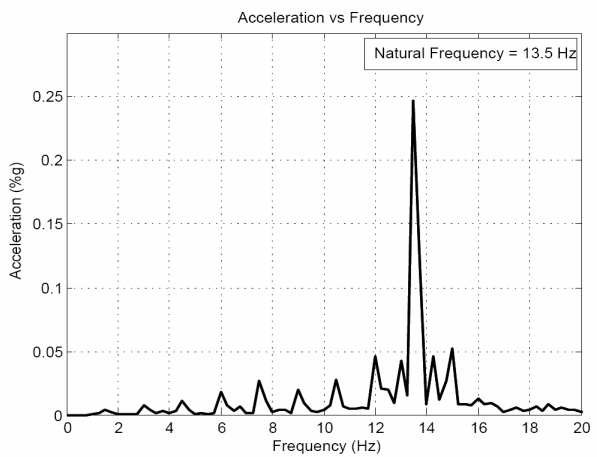
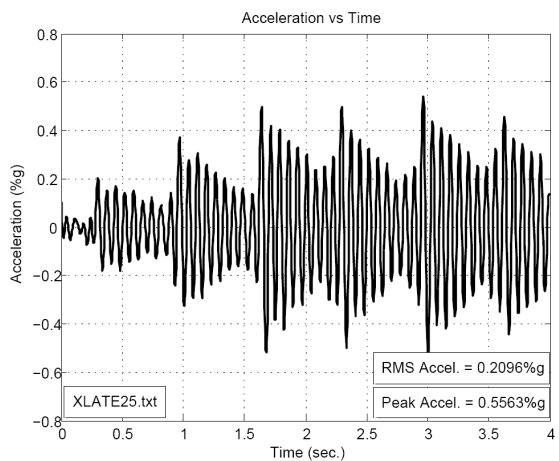
f) Walking Parallel at 116 bpm (1.93 Hz)



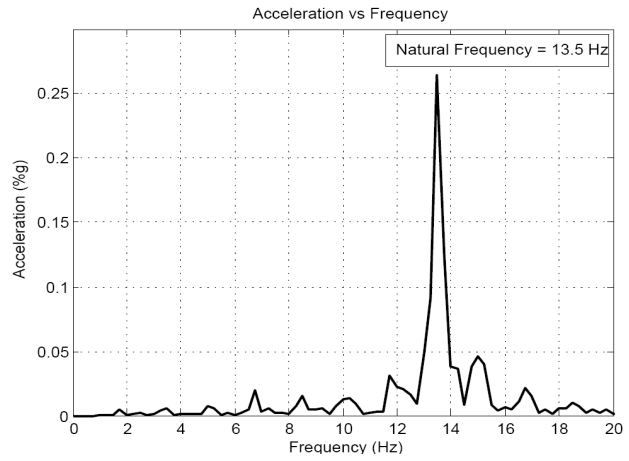
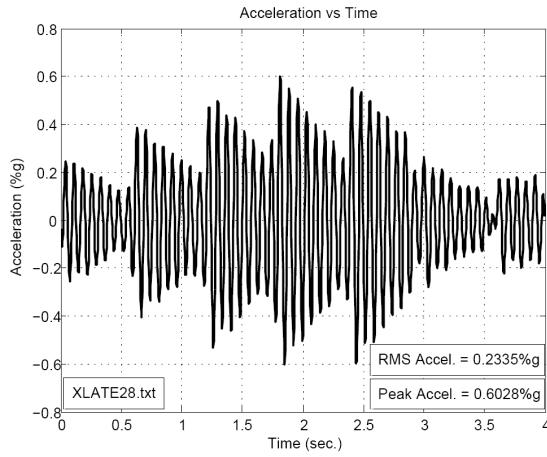
g) Walking Parallel at 135 bpm (2.25 Hz)



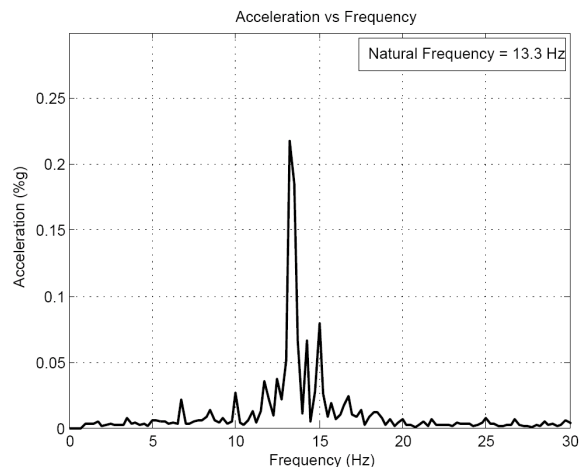
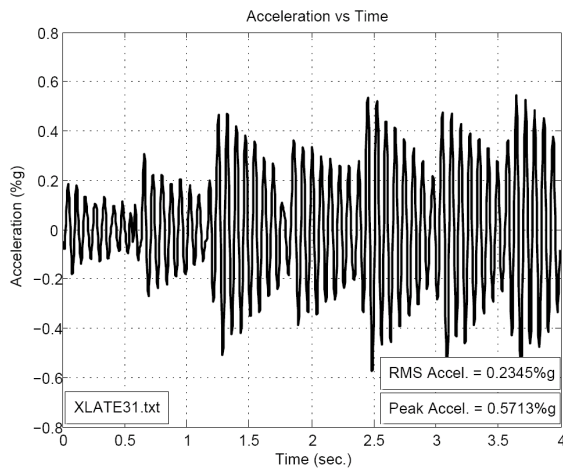
h) Walking Parallel at 135 bpm (2.25 Hz)



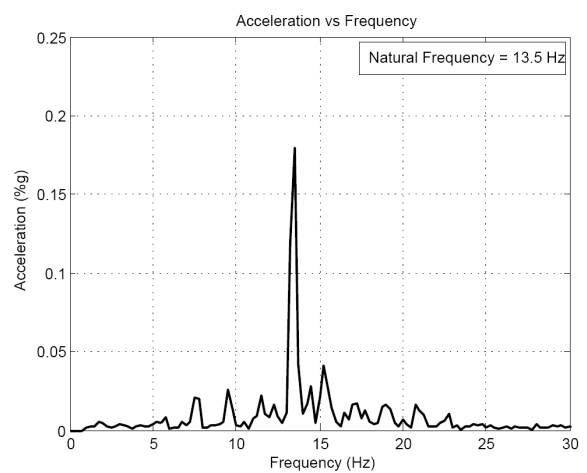
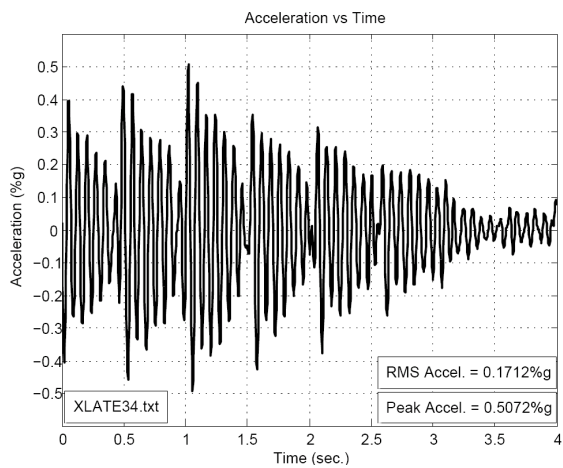
i) Walking at 90 bpm (1.50 Hz)



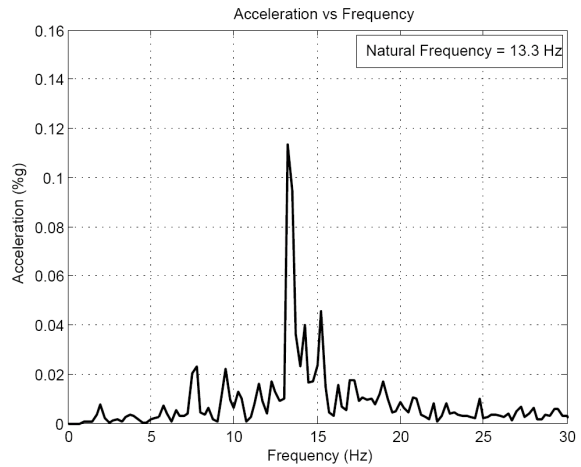
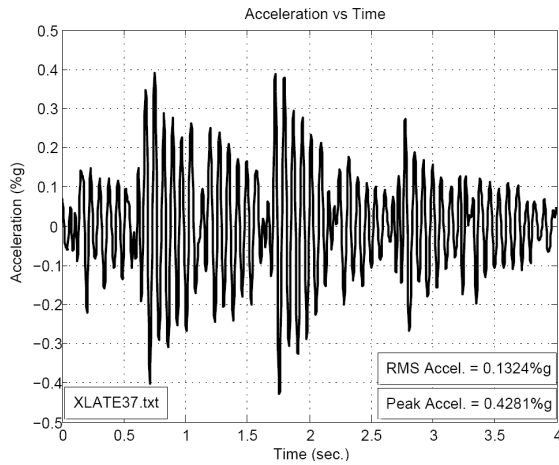
j) Walking Perpendicular at 101 bpm (1.68 Hz)



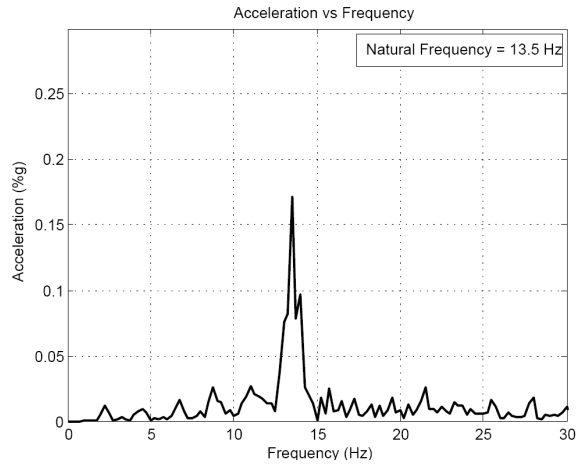
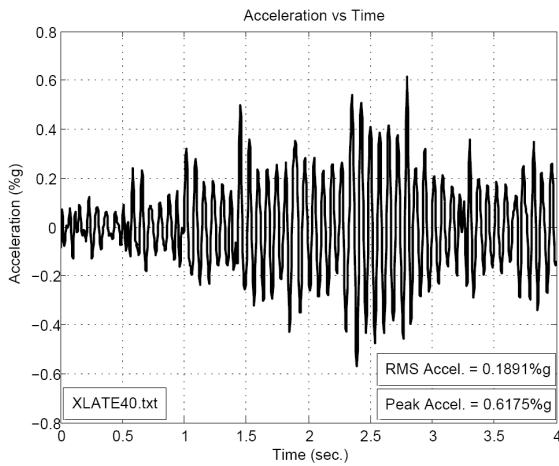
k) Walking Perpendicular at 101 bpm (1.68 Hz)



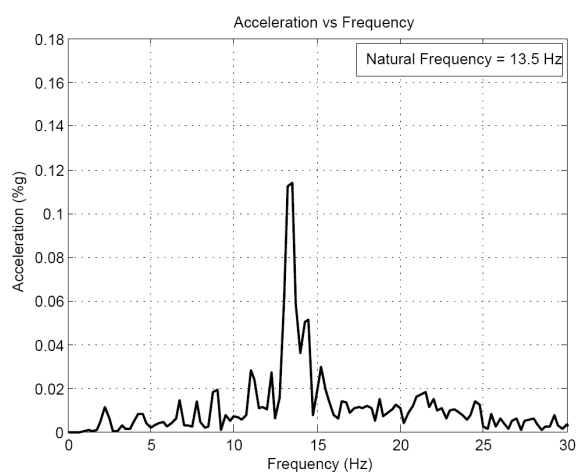
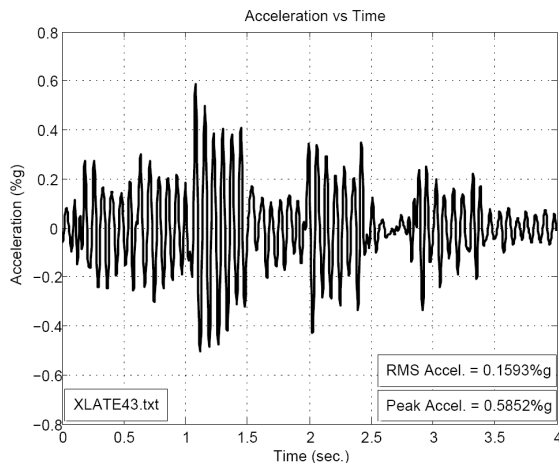
l) Walking Perpendicular at 116 bpm (1.93 Hz)



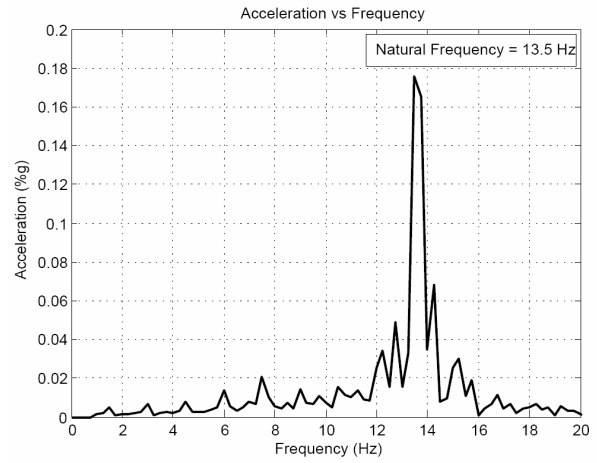
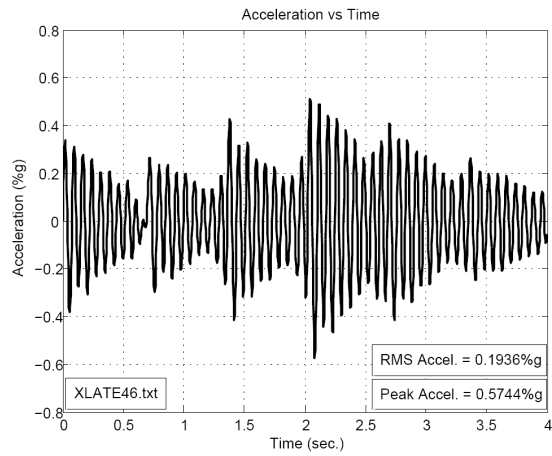
m) Walking Perpendicular at 116 bpm (1.93 Hz)



n) Walking Perpendicular at 135 bpm (2.25 Hz)

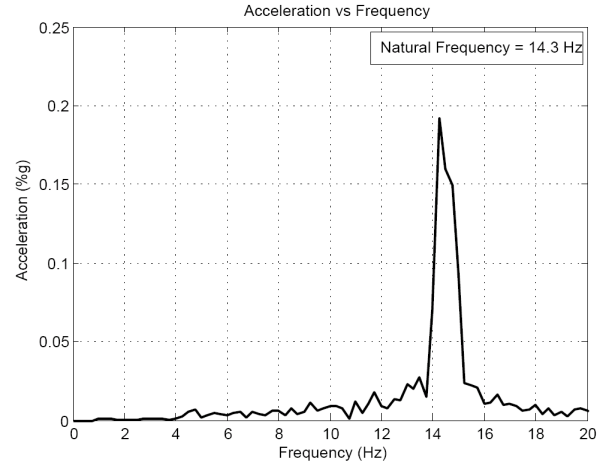
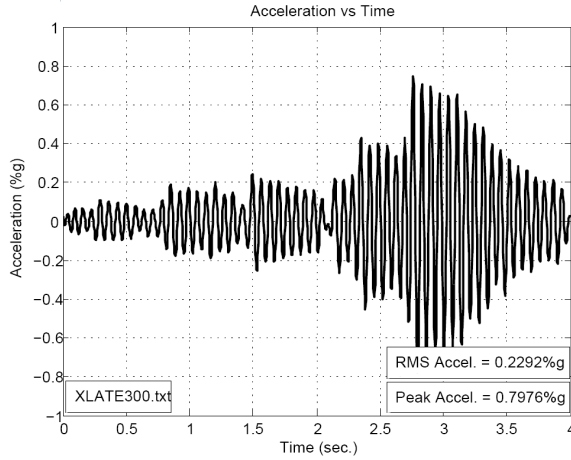


o) Walking Perpendicular at 135 bpm (2.25 Hz)

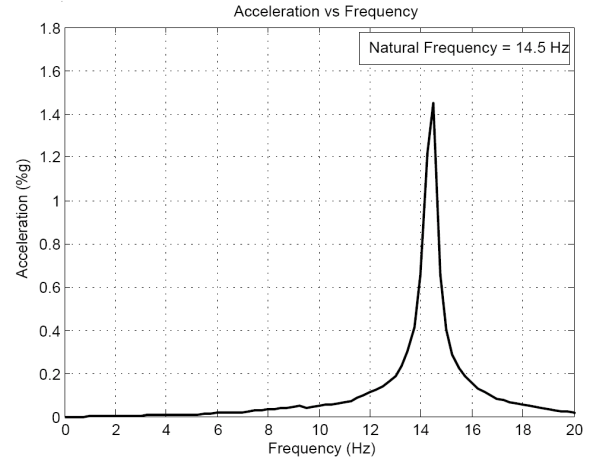
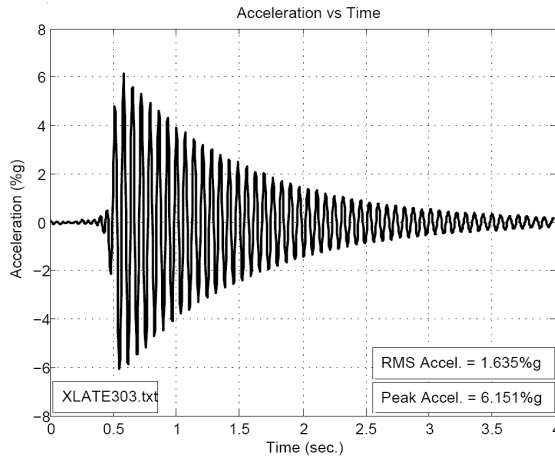


p) Walking Perpendicular at 90 bpm (1.50 Hz)

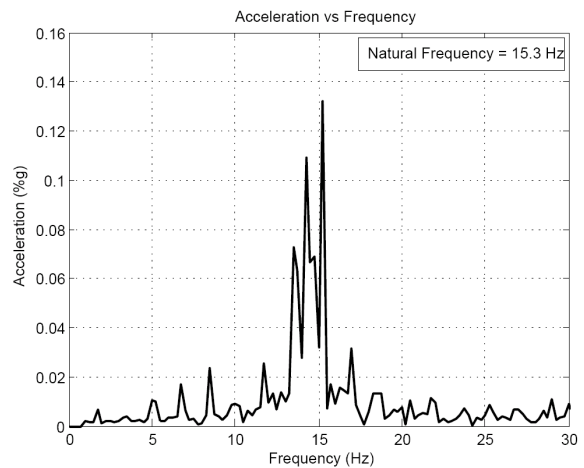
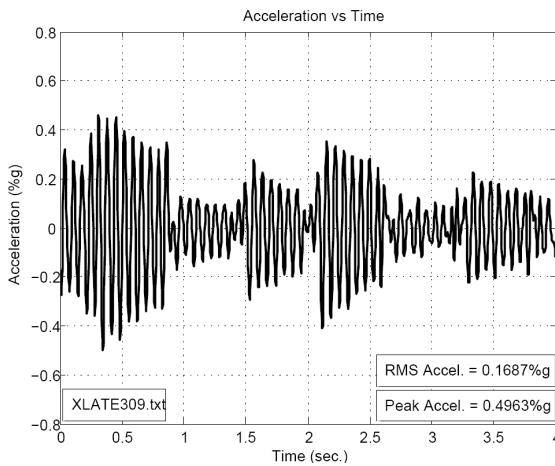
A.6 Bay 6, Royal Reef:



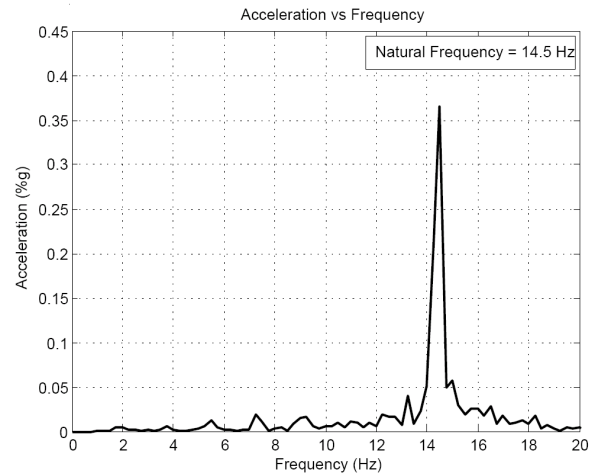
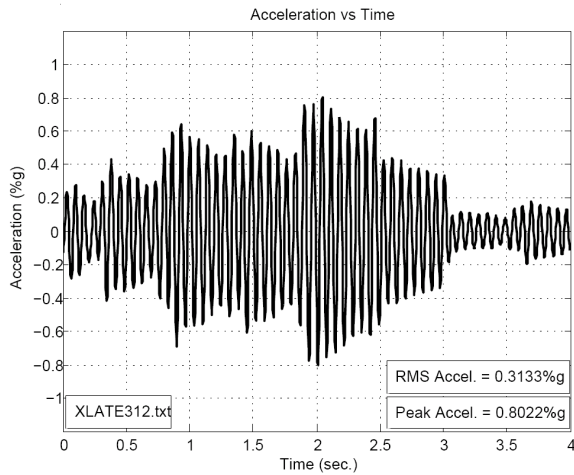
a) Ambient Vibrations. Accelerometer at Floor Center



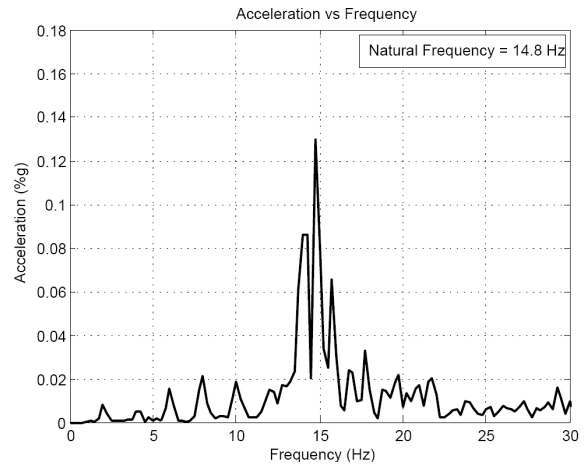
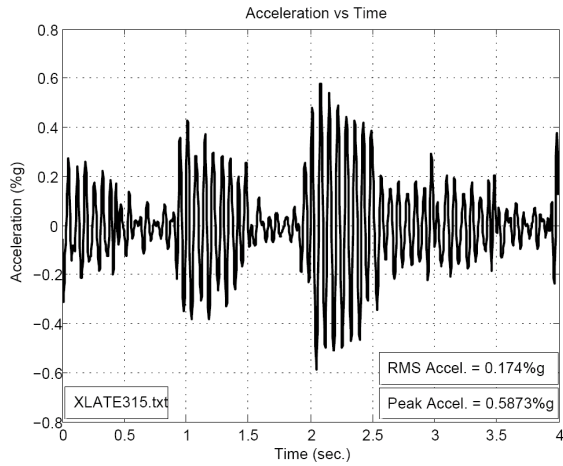
b) Heel-Drop. Accelerometer at Floor Center



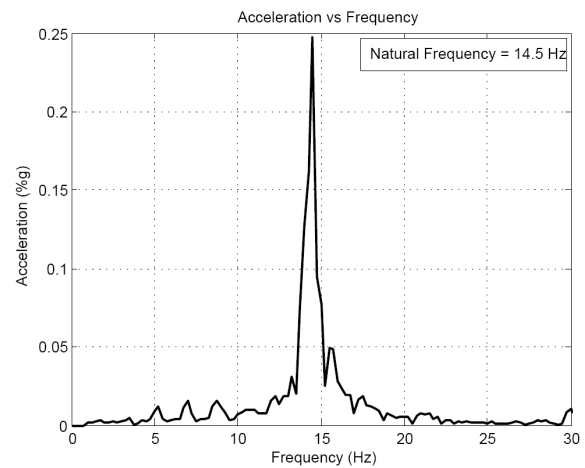
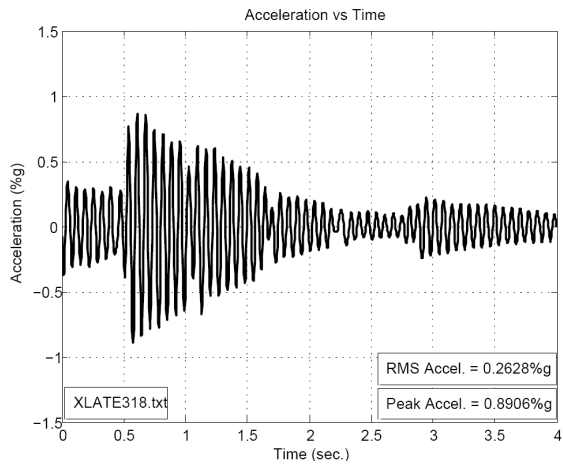
c) Walking Perpendicular at 100 bpm (1.67 Hz)



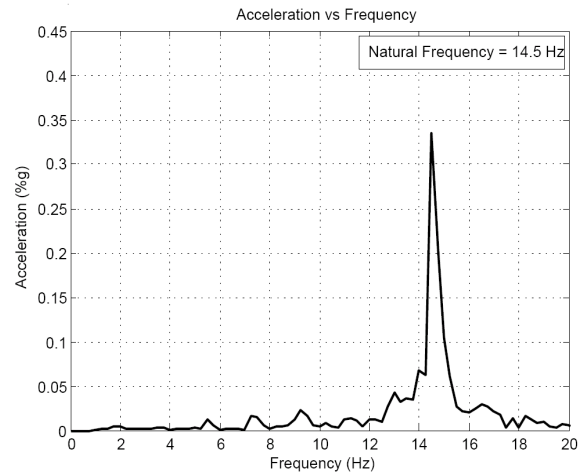
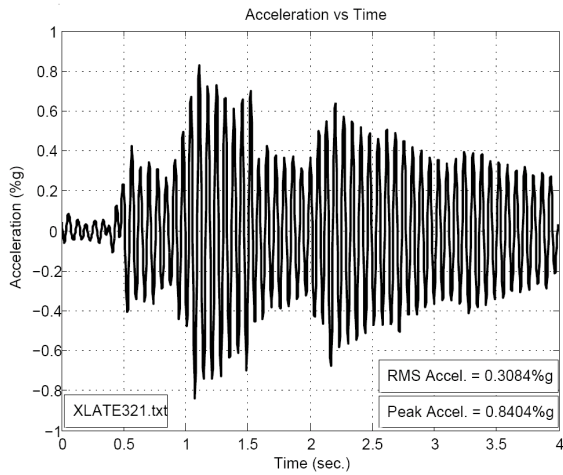
d) Walking Perpendicular at 109 bpm (1.82)



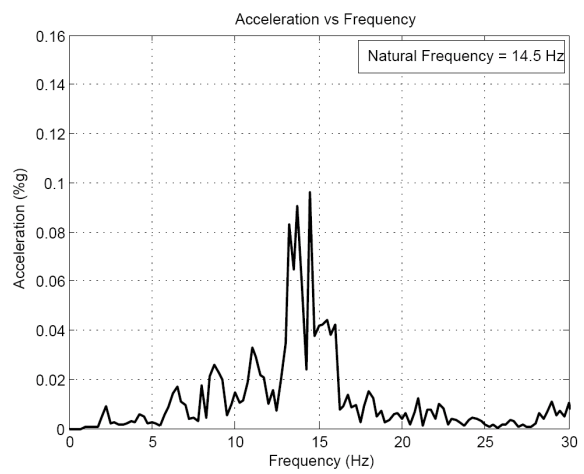
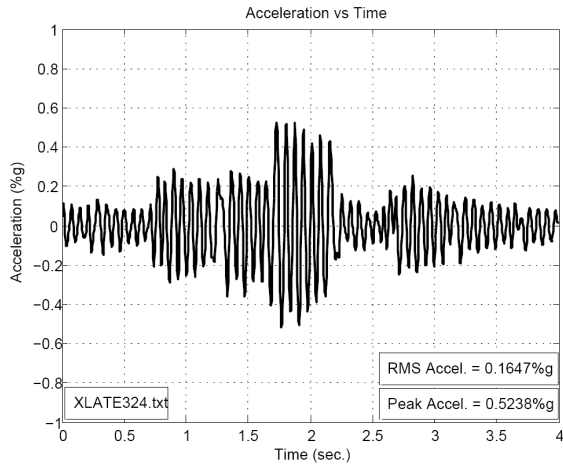
e) Walking Perpendicular at 118 bpm (1.97 Hz)



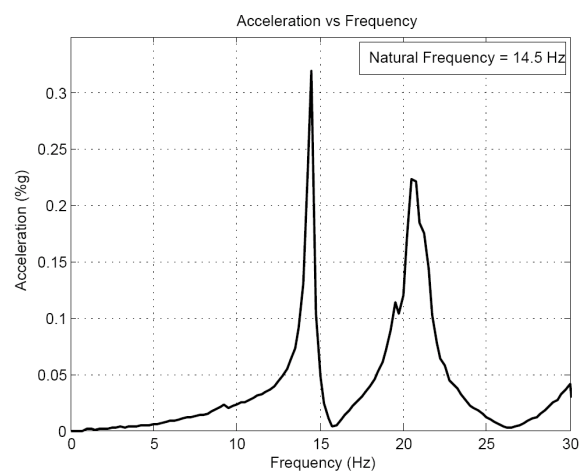
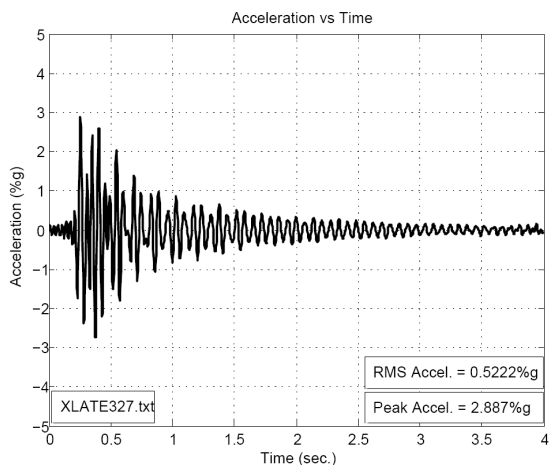
f) Walking Parallel at 100 bpm (1.67 Hz)



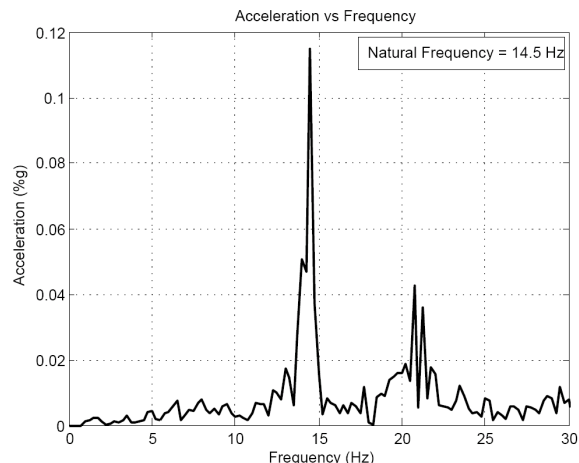
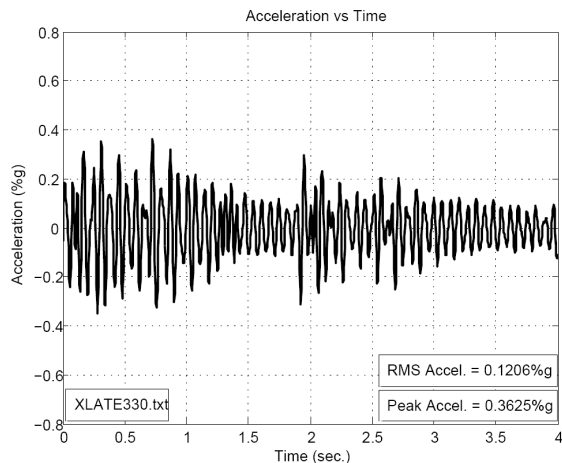
g) Walking Parallel at 109 bpm (1.82 Hz)



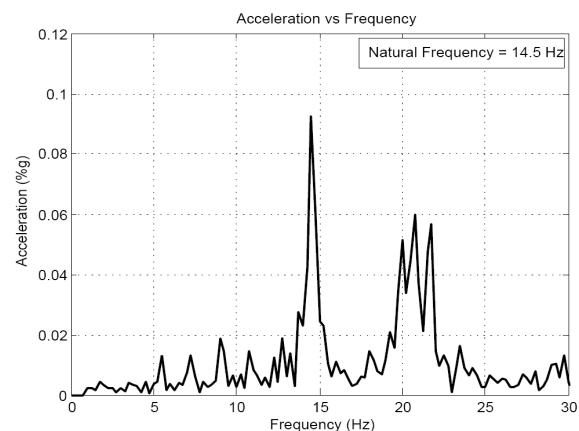
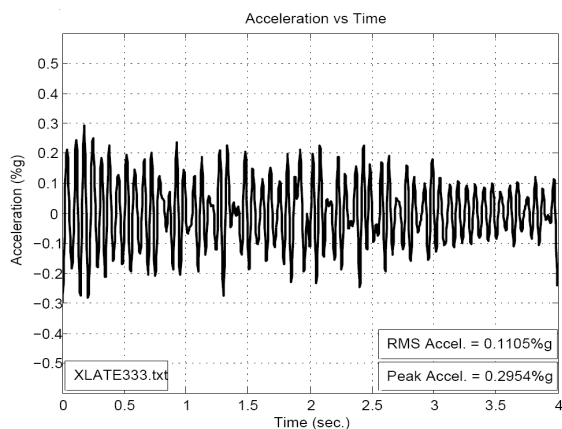
h) Walking Parallel at 118 bpm (1.97 Hz)



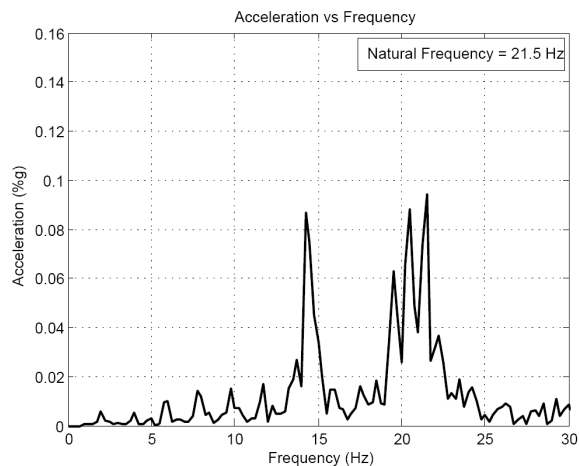
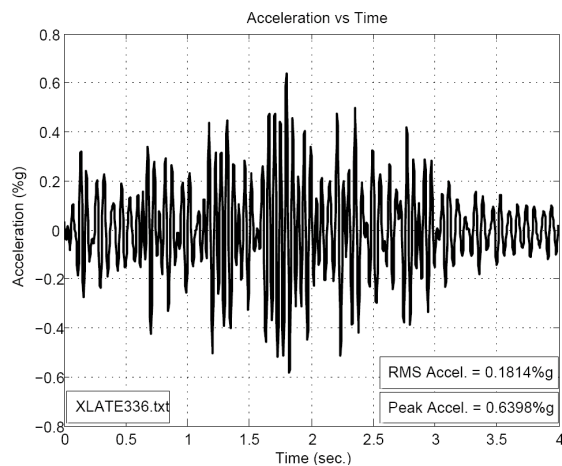
i) Heel-Drop



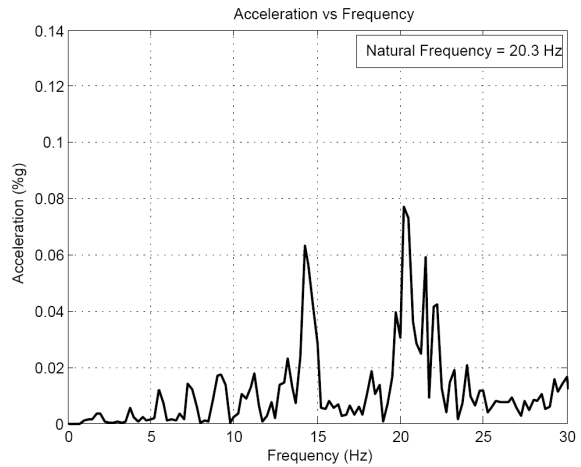
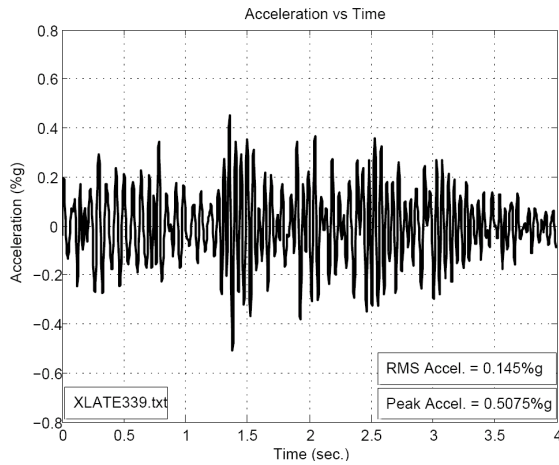
j) Walking Perpendicular at 100 bpm (1.67 Hz)



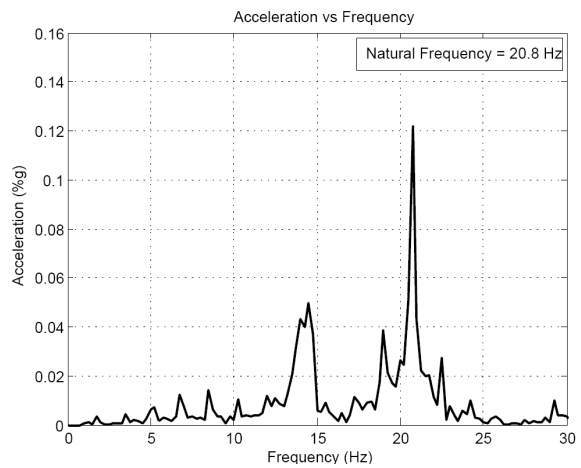
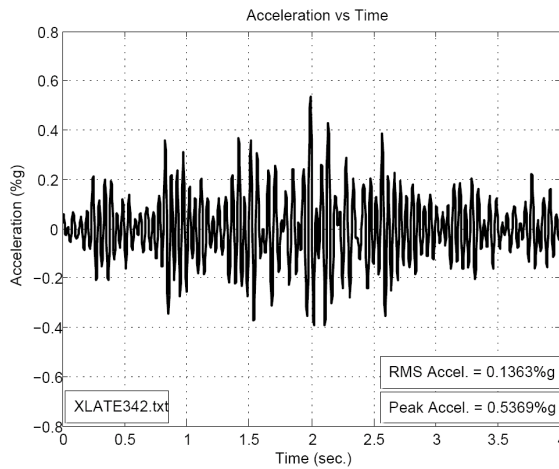
k) Walking Perpendicular at 109 bpm (1.82 Hz)



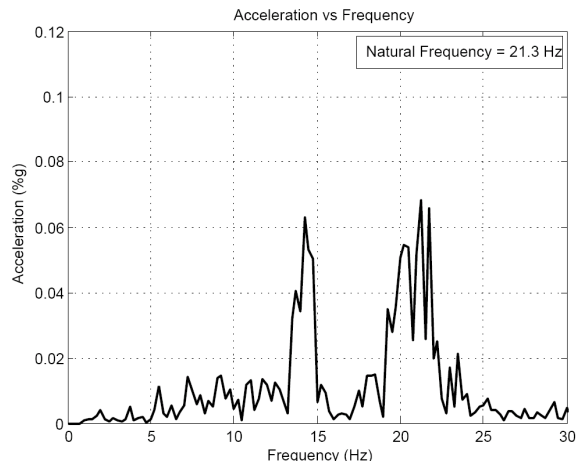
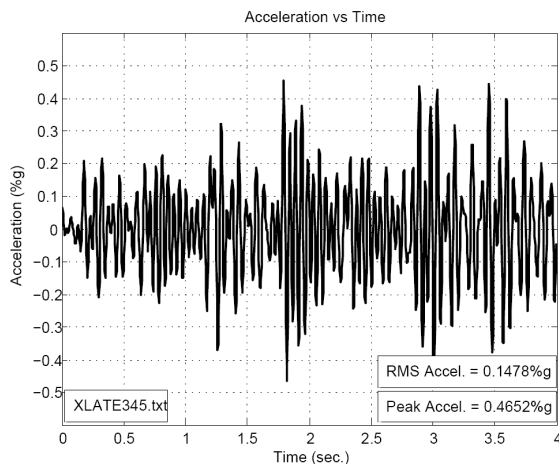
l) Walking Perpendicular at 118 bpm (1.97 Hz)



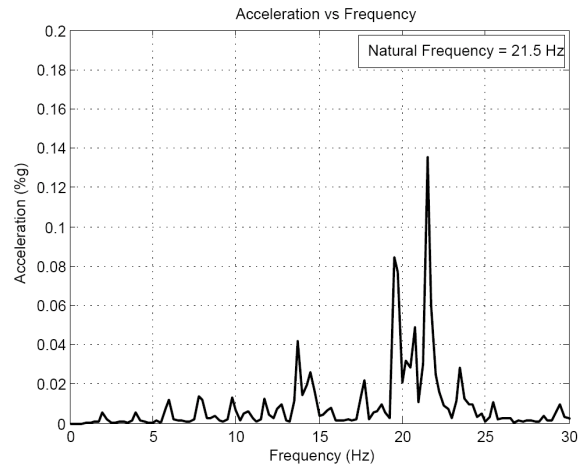
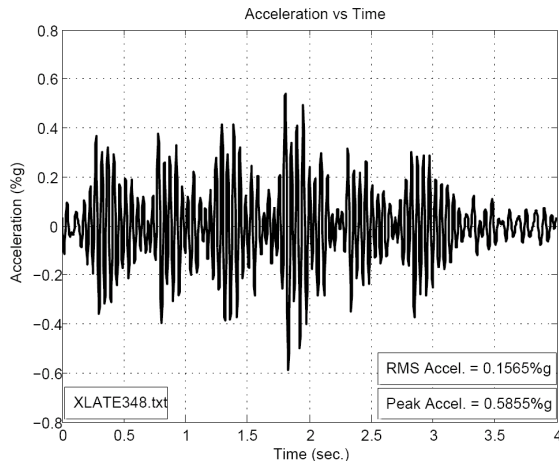
m) Walking Perpendicular at 109 bpm (1.82 Hz)



n) Walking Parallel at 100 bpm (1.67 Hz)



o) Walking Parallel at 109 bpm (1.82 Hz)



p) Walking Parallel at 118 bpm (1.97 Hz)