

APPENDIX B
FREQUENCY TEST DATA

Table B. 1—Measured Frequencies

Test Identification	Excitation	Measured Frequencies (Hz)				
		Center Floor	NE Support	NW Support	SE Support	SW Support
K-30-B	Ambient	6.00	22.50	23.00	23.00	23.00
	Heel Drop	5.25	22.25	22.50	22.50	22.50
	Bouncing	5.50	-	-	-	-
	Walking	5.50	-	-	-	-
K-30-BL	Ambient	5.50	21.75	22.00	21.00	21.50
	Heel Drop	5.00	21.25	21.50	20.50	21.00
	Bouncing	5.00	-	-	-	-
	Walking	5.25	-	-	-	-
K-30-W	Ambient	5.00	19.50	19.25	19.00	19.25
	Heel Drop	5.00	19.25	18.75	18.75	19.00
	Bouncing	5.00	-	-	-	-
	Walking	5.00	-	-	-	-
K-30-WL	Ambient	4.75	17.50	18.75	18.00	18.75
	Heel Drop	4.50	17.00	17.00	17.25	17.00
	Bouncing	4.75	-	-	-	-
	Walking	4.50	-	-	-	-
K-30-R	Ambient	6.25	25.00	25.00	25.00	25.00
	Heel Drop	6.00	24.75	25.00	24.75	24.75
	Bouncing	6.00	-	-	-	-
	Walking	6.25	-	-	-	-
K-30-RL	Ambient	6.25	23.00	23.75	23.50	23.00
	Heel Drop	5.75	22.50	22.00	23.00	22.50
	Bouncing	5.75	-	-	-	-
	Walking	6.00	-	-	-	-
K-60-B	Ambient	5.50	20.50	20.50	21.00	20.25
	Heel Drop	5.25	20.25	20.00	20.50	19.75
	Bouncing	5.25	-	-	-	-
	Walking	5.25	-	-	-	-

Table B. 1 (Continued)

Test Identification	Excitation	Measured Frequencies (Hz)				
		Center Floor	NE Support	NW Support	SE Support	SW Support
K-60-W	Ambient	5.25	16.50	16.25	16.00	16.25
	Heel Drop	5.25	16.25	15.75	15.50	15.75
	Bouncing	5.25	-	-	-	-
	Walking	5.00	-	-	-	-
K-60-WL	Ambient	4.75	16.00	15.50	16.25	15.00
	Heel Drop	4.50	15.50	15.00	16.00	14.75
	Bouncing	4.50	-	-	-	-
	Walking	4.50	-	-	-	-
K-60-R	Ambient	6.00	19.75	20.50	20.00	20.50
	Heel Drop	6.00	19.25	20.25	19.75	20.00
	Bouncing	6.00	-	-	-	-
	Walking	6.00	-	-	-	-
LH-60-B	Ambient	5.00	21.25	23.25	22.00	23.00
	Heel Drop	5.00	21.00	23.00	22.00	22.00
	Bouncing	5.00	-	-	-	-
	Walking	5.00	-	-	-	-
LH-60-W	Ambient	5.25	20.50	22.25	20.50	22.25
	Heel Drop	5.00	20.00	22.00	20.25	22.00
	Bouncing	5.00	-	-	-	-
	Walking	5.00	-	-	-	-
LH-60-WL	Ambient	4.75	17.25	17.50	18.00	18.00
	Heel Drop	4.25	16.50	17.50	17.50	17.75
	Bouncing	4.25	-	-	-	-
	Walking	4.25	-	-	-	-
LH-60-R	Ambient	5.00	19.75	21.00	19.75	21.00
	Heel Drop	5.25	19.50	21.00	19.25	20.25
	Bouncing	5.25	-	-	-	-
	Walking	5.25	-	-	-	-

Table B. 1 (Continued)

Test Identification	Excitation	Measured Frequencies (Hz)				
		Center Floor	NE Support	NW Support	SE Support	SW Support
K-60-W	Ambient	5.25	16.50	16.25	16.00	16.25
	Heel Drop	5.25	16.25	15.75	15.50	15.75
	Bouncing	5.25	-	-	-	-
	Walking	5.00	-	-	-	-
K-60-WL	Ambient	4.75	16.00	15.50	16.25	15.00
	Heel Drop	4.50	15.50	15.00	16.00	14.75
	Bouncing	4.50	-	-	-	-
	Walking	4.50	-	-	-	-
K-60-R	Ambient	6.00	19.75	20.50	20.00	20.50
	Heel Drop	6.00	19.25	20.25	19.75	20.00
	Bouncing	6.00	-	-	-	-
	Walking	6.00	-	-	-	-
LH-60-B	Ambient	5.00	21.25	23.25	22.00	23.00
	Heel Drop	5.00	21.00	23.00	22.00	22.00
	Bouncing	5.00	-	-	-	-
	Walking	5.00	-	-	-	-
LH-60-W	Ambient	5.25	20.50	22.25	20.50	22.25
	Heel Drop	5.00	20.00	22.00	20.25	22.00
	Bouncing	5.00	-	-	-	-
	Walking	5.00	-	-	-	-
LH-60-WL	Ambient	4.75	17.25	17.50	18.00	18.00
	Heel Drop	4.25	16.50	17.50	17.50	17.75
	Bouncing	4.25	-	-	-	-
	Walking	4.25	-	-	-	-
LH-60-R	Ambient	5.00	19.75	21.00	19.75	21.00
	Heel Drop	5.25	19.50	21.00	19.25	20.25
	Bouncing	5.25	-	-	-	-
	Walking	5.25	-	-	-	-

Table B. 1 (Continued)

Test Identification	Excitation	Measured Frequencies (Hz)				
		Center Floor	NE Support	NW Support	SE Support	SW Support
LH-60-RL	Ambient	5.00	17.75	19.00	17.50	19.25
	Heel Drop	4.75	17.75	18.50	17.50	18.75
	Bouncing	4.75	-	-	-	-
	Walking	4.75	-	-	-	-
LH-90-B	Ambient	4.75	20.00	19.75	19.75	20.00
	Heel Drop	4.50	19.75	19.25	19.00	19.75
	Bouncing	4.75	-	-	-	-
	Walking	4.75	-	-	-	-
LH-90-BL	Ambient	4.50	18.25	18.00	18.50	18.25
	Heel Drop	4.00	18.00	17.75	18.00	17.75
	Bouncing	4.00	-	-	-	-
	Walking	4.25	-	-	-	-
LH-90-W	Ambient	4.50	18.00	17.00	17.00	17.00
	Heel Drop	4.25	17.50	17.00	16.75	17.25
	Bouncing	4.25	-	-	-	-
	Walking	4.25	-	-	-	-
LH-90-WL	Ambient	4.00	16.00	16.25	16.00	16.50
	Heel Drop	4.00	16.00	16.00	15.75	15.75
	Bouncing	4.00	-	-	-	-
	Walking	4.00	-	-	-	-
LH-90-R	Ambient	5.50	21.25	21.25	21.00	21.25
	Heel Drop	5.50	21.00	21.00	20.75	21.00
	Bouncing	5.50	-	-	-	-
	Walking	5.50	-	-	-	-
JG-K-30-B	Ambient	5.00	17.75	20.75	17.75	18.00
	Heel Drop	5.00	17.00	20.25	17.00	17.00
	Bouncing	5.00	-	-	-	-
	Walking	5.00	-	-	-	-

Table B. 1 (Continued)

Test Identification	Excitation	Measured Frequencies (Hz)				
		Center Floor	NE Support	NW Support	SE Support	SW Support
JG-K-30-BL	Ambient	4.75	15.75	15.75	15.75	15.57
	Heel Drop	4.50	15.25	15.25	15.25	15.00
	Bouncing	4.50	-	-	-	-
	Walking	4.50	-	-	-	-
JG-K-30-W	Ambient	5.00	16.25	16.00	16.25	16.25
	Heel Drop	4.75	15.75	15.75	16.00	15.75
	Bouncing	4.75	-	-	-	-
	Walking	4.75	-	-	-	-
JG-K-30-WL	Ambient	4.50	16.00	15.75	16.25	16.25
	Heel Drop	4.50	15.25	15.25	15.25	15.25
	Bouncing	4.50	-	-	-	-
	Walking	4.50	-	-	-	-
JG-K-30-R	Ambient	5.75	23.00	23.00	22.75	22.50
	Heel Drop	6.50	22.25	23.00	22.75	22.25
	Bouncing	5.75	-	-	-	-
	Walking	6.00	-	-	-	-
JG-K-30-RL	Ambient	5.50	22.00	23.00	22.50	23.00
	Heel Drop	5.00	22.00	22.25	22.25	22.50
	Bouncing	5.00	-	-	-	-
	Walking	5.00	-	-	-	-
JG-LH-60-B	Ambient	5.25	22.75	24.00	22.75	24.00
	Heel Drop	5.25	22.25	23.50	22.25	23.50
	Bouncing	5.25	-	-	-	-
	Walking	5.25	-	-	-	-
JG-LH-60-BL	Ambient	5.00	19.50	21.25	19.50	21.00
	Heel Drop	4.75	19.25	20.75	19.25	20.50
	Bouncing	4.75	-	-	-	-
	Walking	4.75	-	-	-	-

Table B. 1 (Continued)

Test Identification	Excitation	Measured Frequencies (Hz)				
		Center Floor	NE Support	NW Support	SE Support	SW Support
JG-LH-60-W	Ambient	5.25	22.00	21.50	20.50	21.00
	Heel Drop	5.25	21.50	21.00	20.00	20.25
	Bouncing	5.25	-	-	-	-
	Walking	5.25	-	-	-	-
JG-LH-60-WL	Ambient	4.75	19.00	20.75	19.00	21.00
	Heel Drop	4.75	19.00	20.00	18.75	20.50
	Bouncing	4.75	-	-	-	-
	Walking	4.75	-	-	-	-
JG-LH-60-R	Ambient	6.25	24.75	26.25	24.75	26.25
	Heel Drop	6.25	24.50	26.00	24.50	26.00
	Bouncing	6.00	-	-	-	-
	Walking	6.25	-	-	-	-
JG-LH-60-RL	Ambient	5.25	21.25	22.50	22.50	21.00
	Heel Drop	5.50	20.75	21.75	22.50	20.75
	Bouncing	5.50	-	-	-	-
	Walking	5.50	-	-	-	-
JG-LH-90-B	Ambient	5.50	19.25	19.00	19.25	19.50
	Heel Drop	5.00	18.75	18.50	19.00	19.00
	Bouncing	5.00	-	-	-	-
	Walking	5.00	-	-	-	-
JG-LH-90-BL	Ambient	5.00	17.75	17.75	17.50	17.00
	Heel Drop	4.50	17.50	17.50	17.50	16.75
	Bouncing	4.50	-	-	-	-
	Walking	4.50	-	-	-	-
JG-LH-90-W	Ambient	5.25	18.00	18.25	18.50	18.00
	Heel Drop	5.00	17.75	18.00	18.00	17.75
	Bouncing	5.00	-	-	-	-
	Walking	5.00	-	-	-	-

Table B. 1 (Continued)

Test Identification	Excitation	Measured Frequencies (Hz)				
		Center Floor	NE Support	NW Support	SE Support	SW Support
JG-LH-90-WL	Ambient	4.50	17.00	17.50	17.25	17.25
	Heel Drop	4.50	16.75	17.00	17.00	17.00
	Bouncing	4.50	-	-	-	-
	Walking	4.50	-	-	-	-
JG-LH-90-R	Ambient	5.50	22.50	22.00	22.25	22.50
	Heel Drop	5.50	22.00	21.50	22.00	22.00
	Bouncing	5.50	-	-	-	-
	Walking	5.50	-	-	-	-
JG-LH-90-RL	Ambient	5.25	20.00	20.00	20.50	20.50
	Heel Drop	5.00	19.50	19.50	20.25	20.00
	Bouncing	5.00	-	-	-	-
	Walking	5.25	-	-	-	-
JG-LH-90-T	Ambient	8.25	29.50	33.50	29.25	33.25
	Heel Drop	8.25	28.75	33.00	28.75	32.75
	Bouncing	8.00	-	-	-	-
	Walking	8.50	-	-	-	-
JG-LH-90-TL	Ambient	7.75	26.00	28.00	26.00	29.50
	Heel Drop	7.75	26.00	28.25	25.75	26.50
	Bouncing	7.75	-	-	-	-
	Walking	8.00	-	-	-	-

EXAMPLE FREQUENCY SPECTRUM PLOTS.

Figures B.1 through B.12 are included as an example set of the frequency spectrum plots (from K-60-B) from which the measured frequencies were obtained.

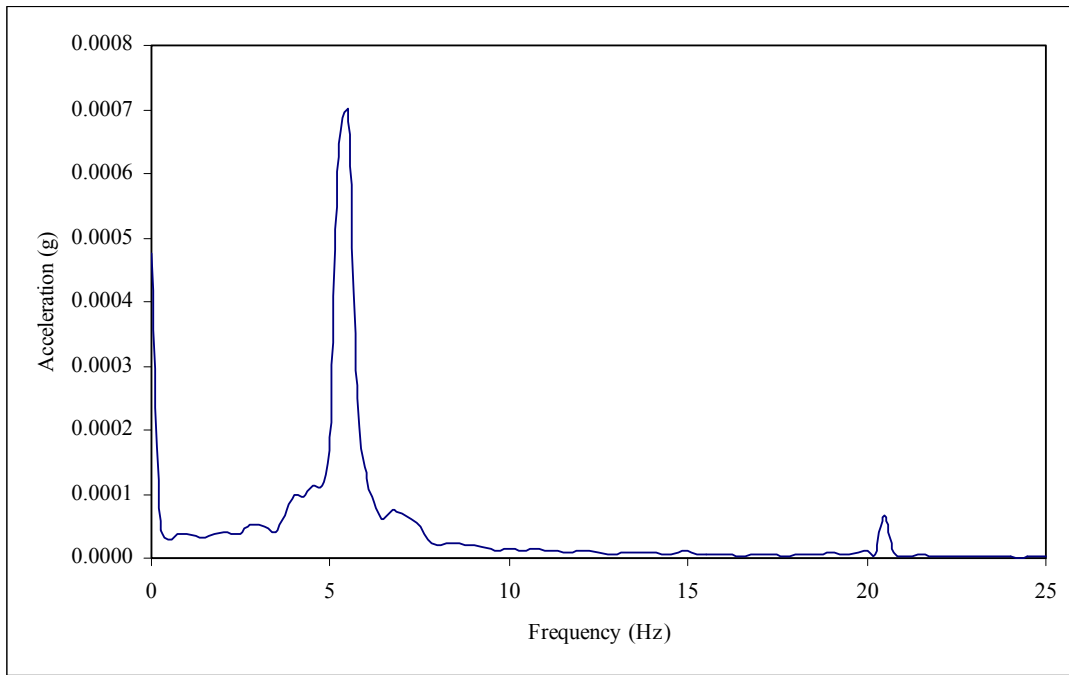


Figure B.1—Frequency Spectrum from Ambient Excitation for K-60-B

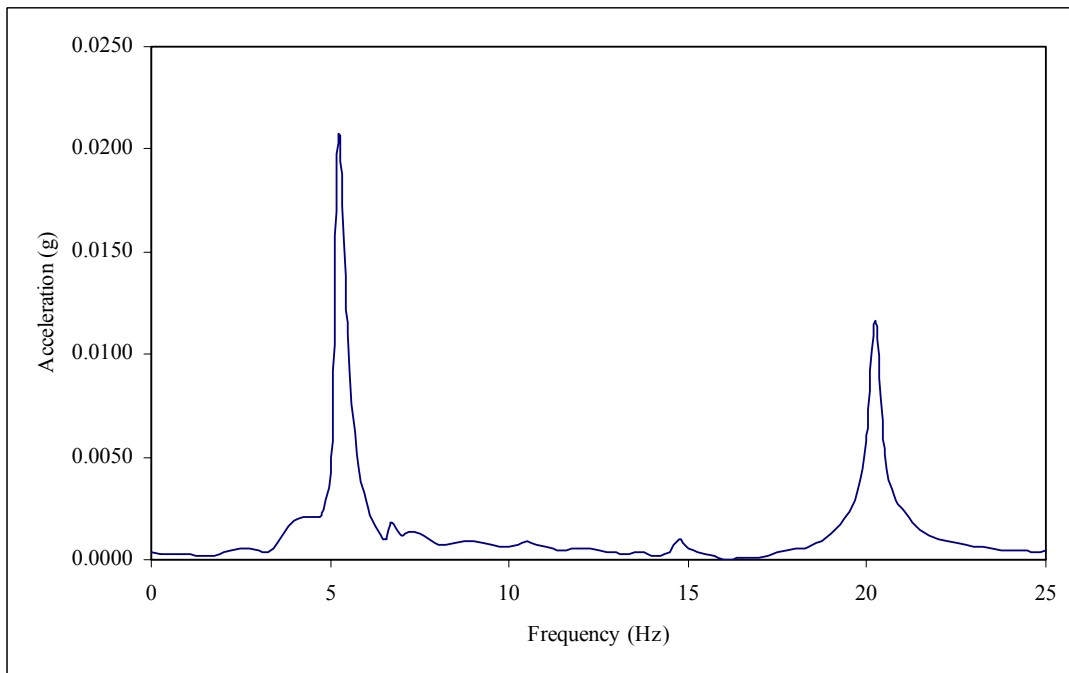


Figure B.2—Frequency Spectrum from Heel Drop Excitation for K-60-B

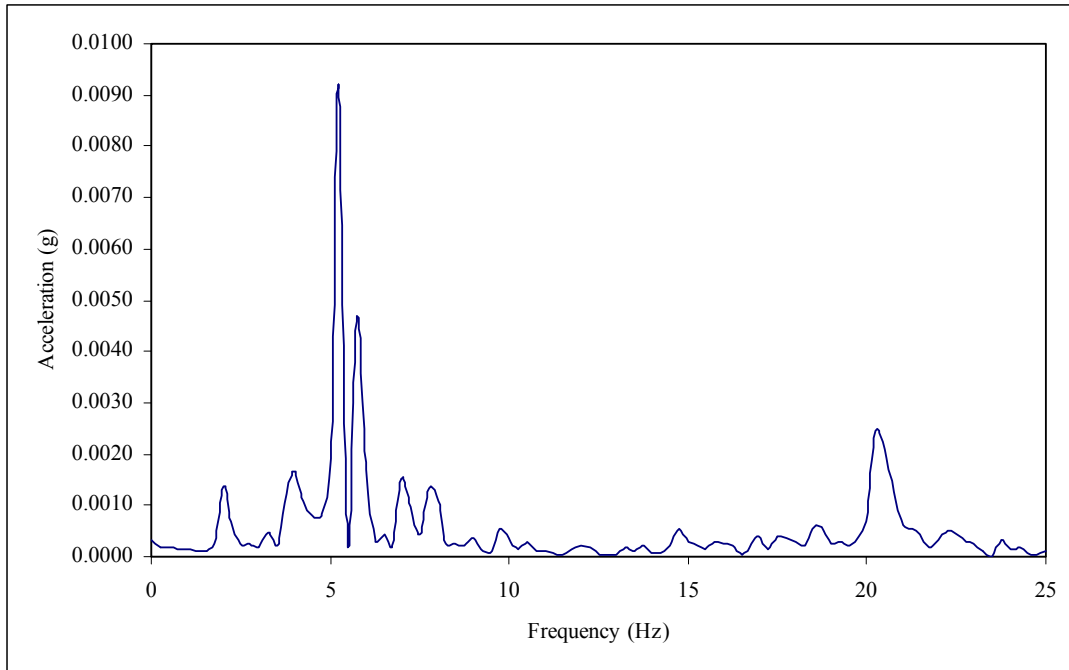


Figure B.3—Frequency Spectrum from Bouncing Excitation for K-60-B

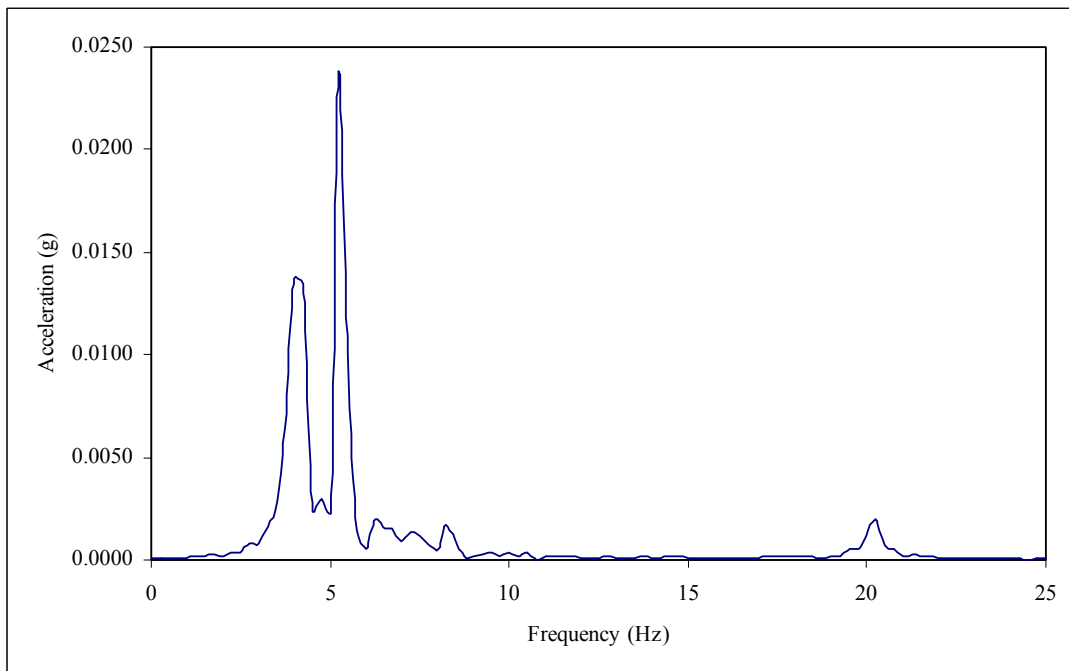


Figure B.4—Frequency Spectrum from Walking Parallel Excitation for K-60-B

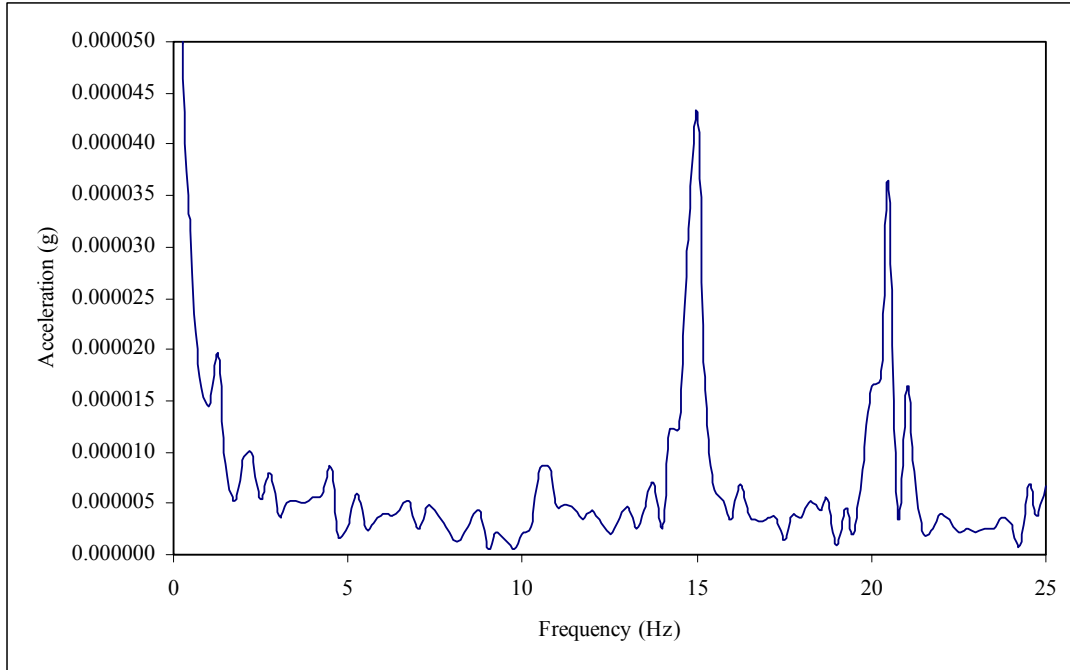


Figure B.5—Frequency Spectrum from Ambient Excitation for NE Corner of K-60-B

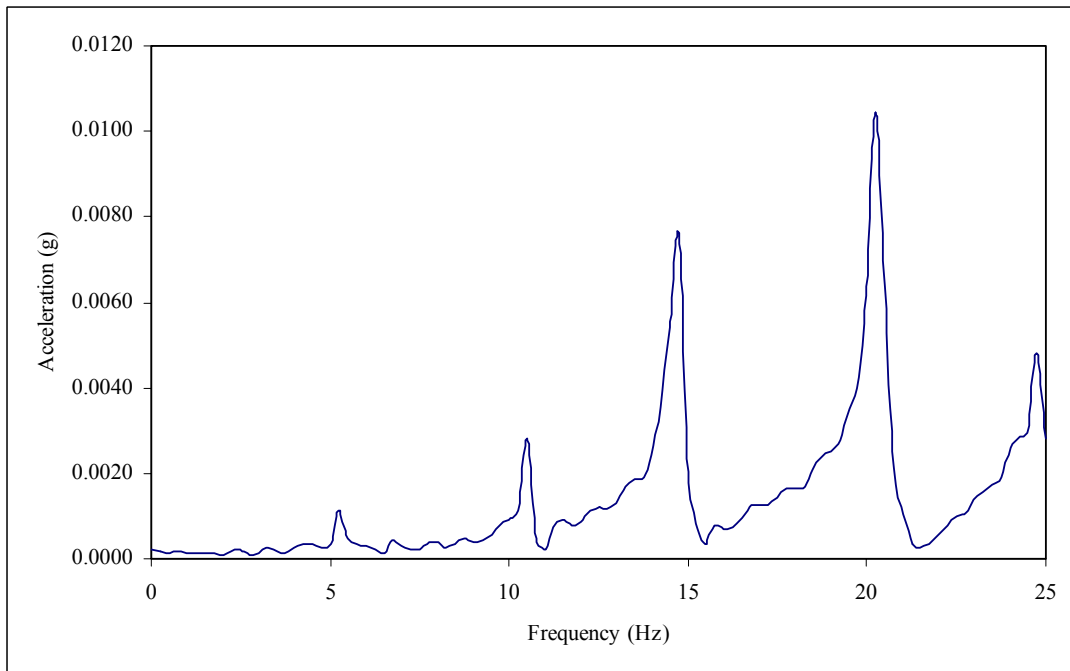


Figure B.6—Frequency Spectrum from Heel Drop Excitation for NE Corner of K-60-B

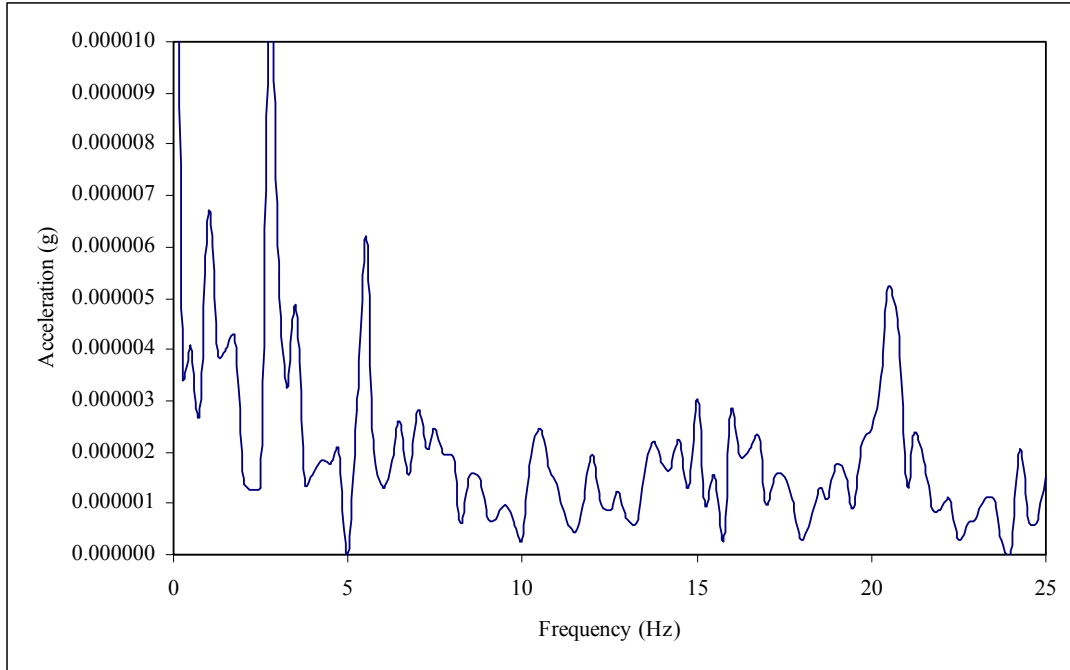


Figure B.7—Frequency Spectrum from Ambient Excitation for NW Corner of K-60-B

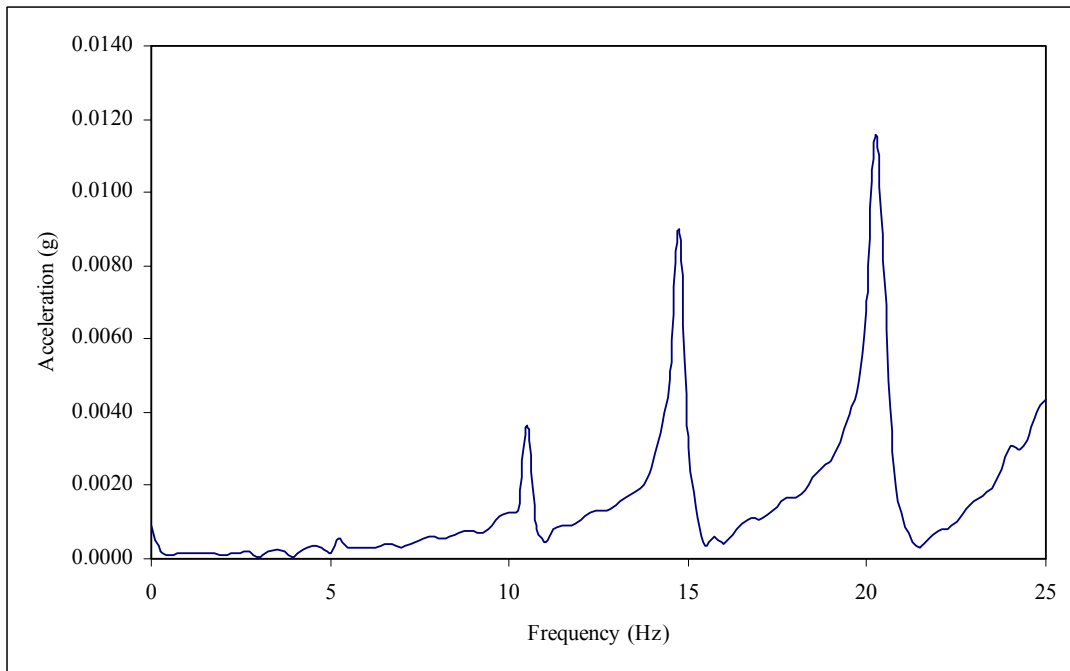


Figure B.8—Frequency Spectrum from Heel Drop Excitation for NW Corner of K-60-B

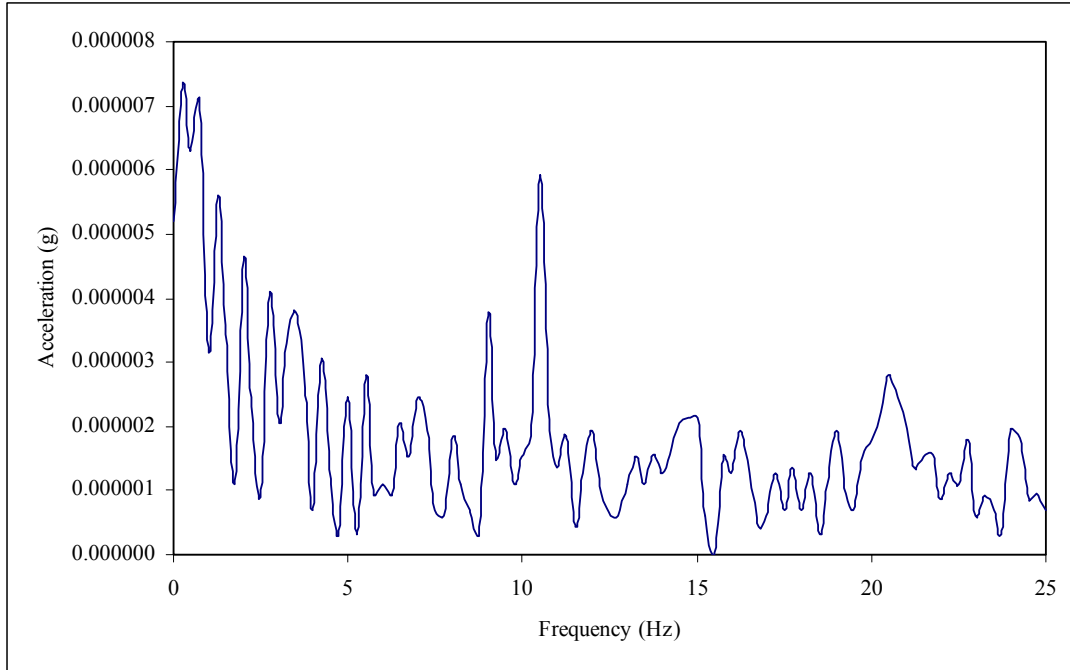


Figure B.9—Frequency Spectrum from Ambient Excitation for SE Corner of K-60-B

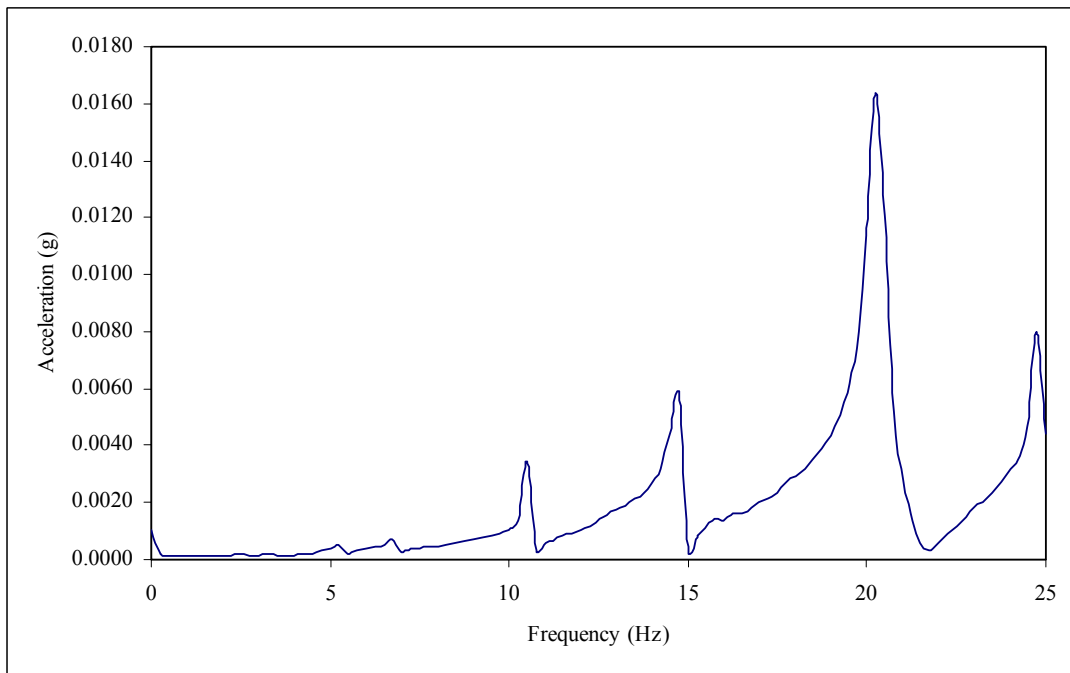


Figure B.10—Frequency Spectrum from Heel Drop Excitation for SE Corner of K-60-B

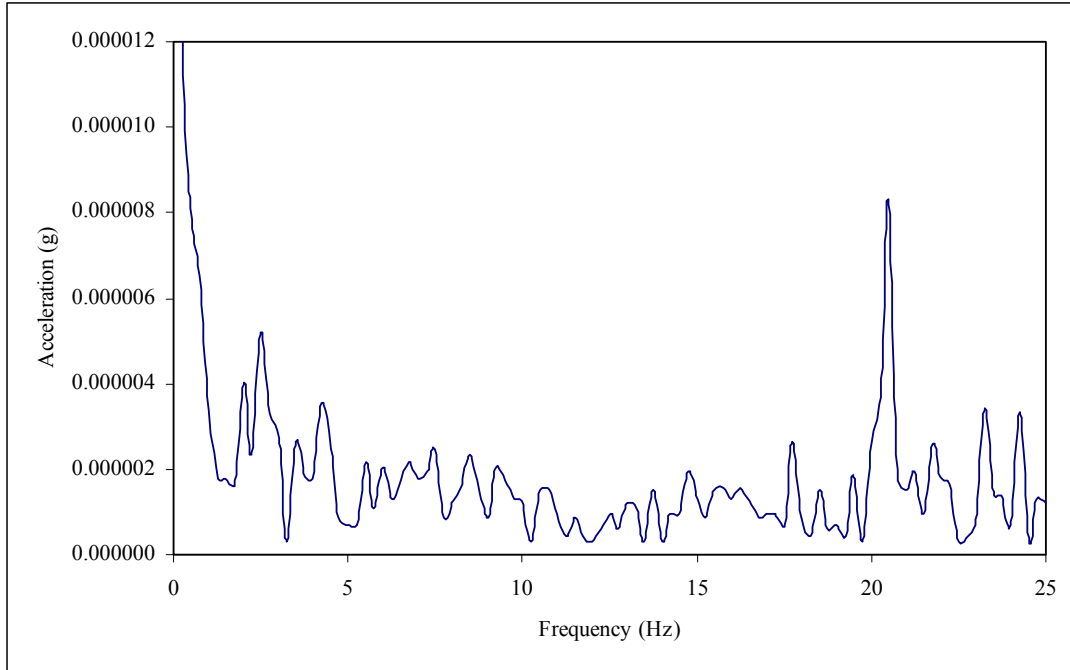


Figure B.11—Frequency Spectrum from Ambient Excitation for SW Corner of K-60-B

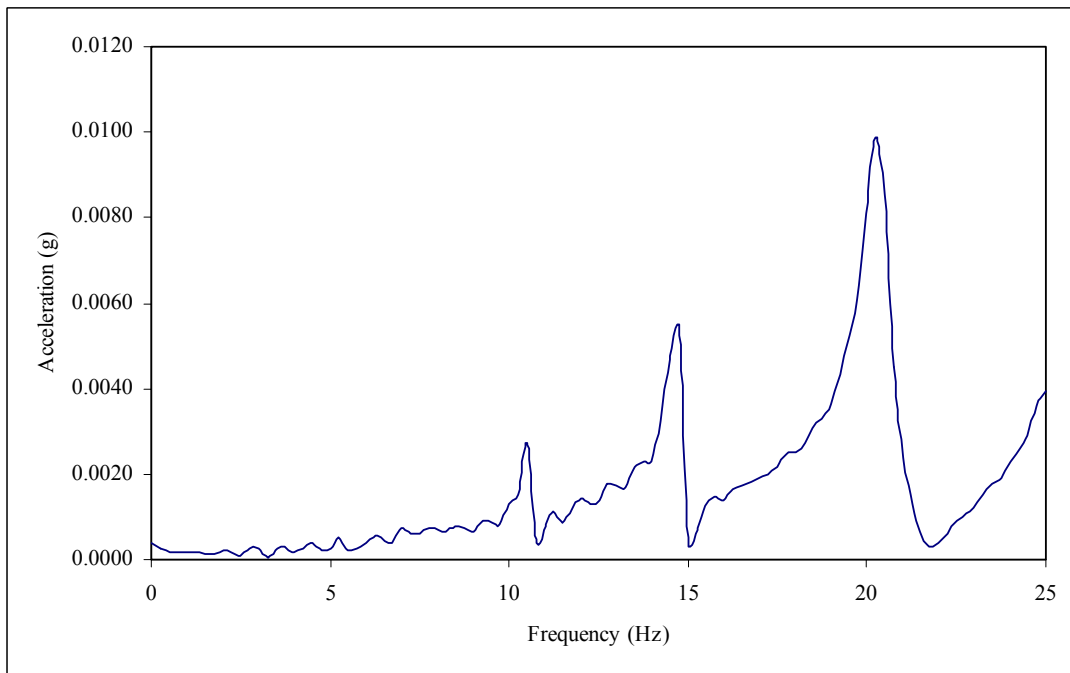


Figure B.12—Frequency Spectrum from Heel Drop Excitation for SW Corner of K-60-B