

# The Reality? – Use of Expedition Phone App.

Ten Second Tests....

3 response plots at different locations:

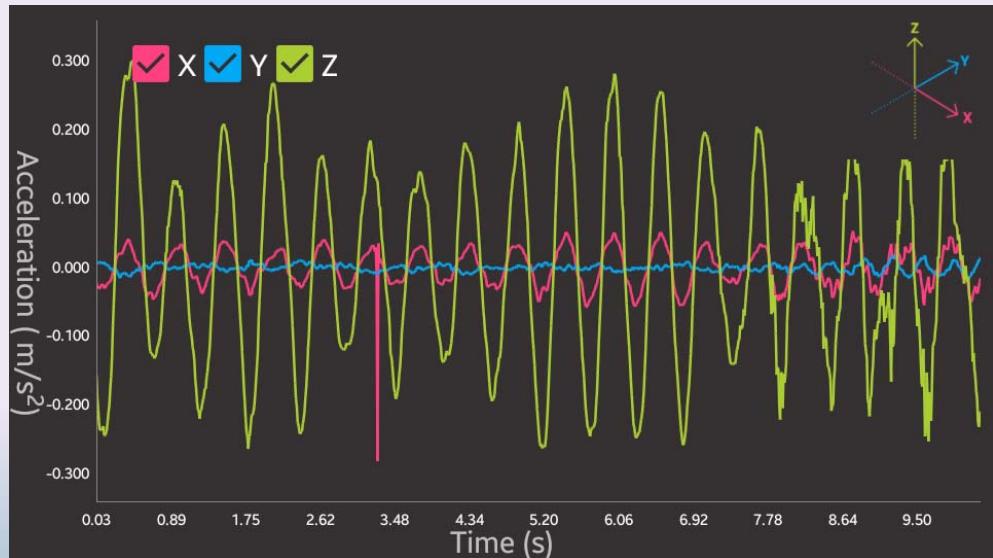
1. Mid-span (outer curve edge – see image)

2. Quarter-span (outer curve edge)

3. Quarter-span (inner curve edge)

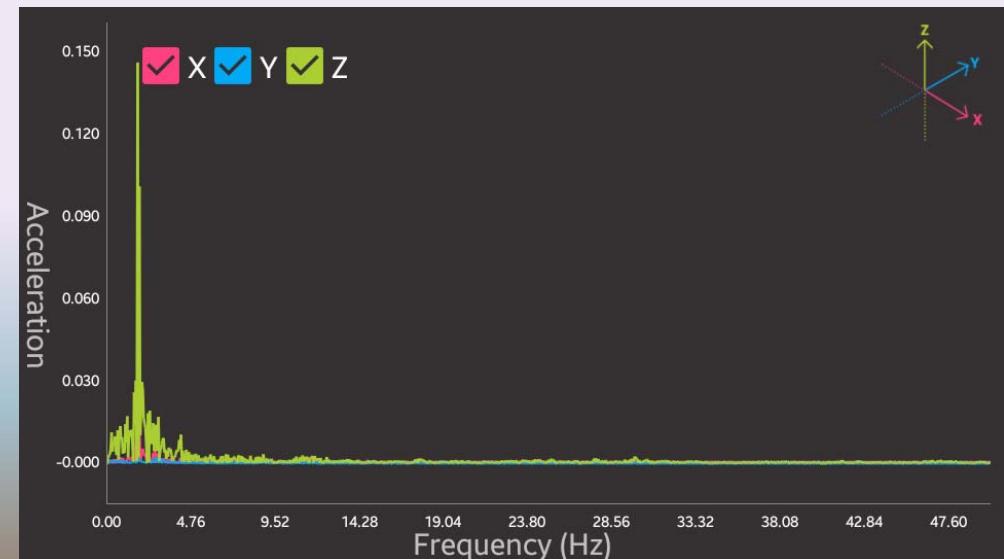


# Expedition Phone App. Notes



Acceleration Plot  
(low lateral X/Y axes)

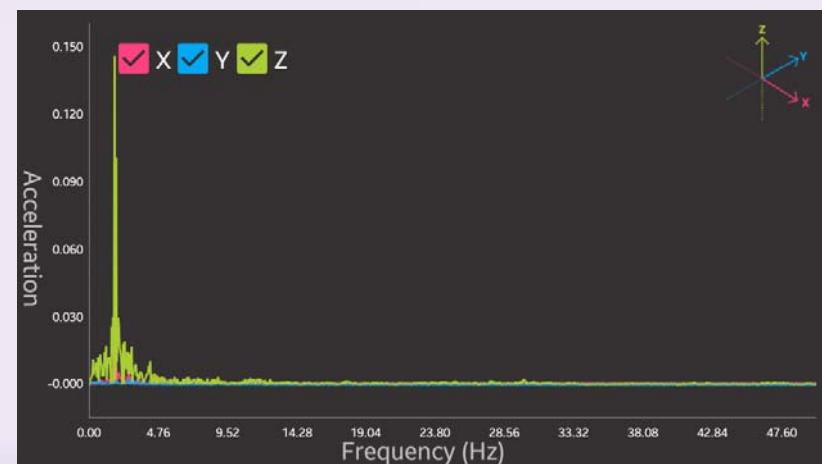
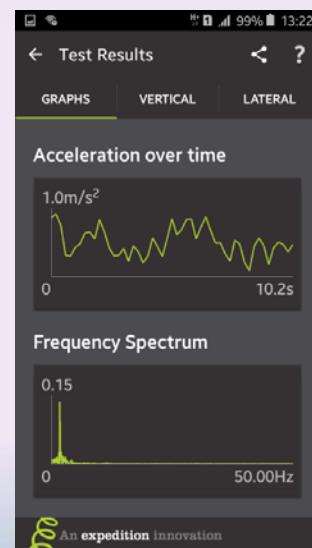
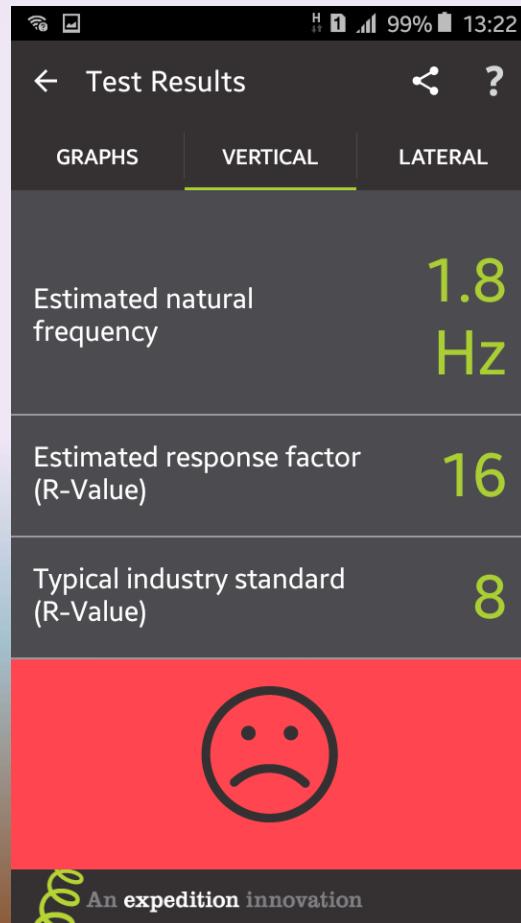
Note 2<sup>nd</sup> and 3<sup>rd</sup> harmonics ( $\sim 4.5\text{Hz}$   
 $\sim 7.5\text{Hz}$ ) << response@ 1.9Hz)



Resonance Plot  
Acceleration vs. Frequency



# 1. Mid-span Outer Edge Plot

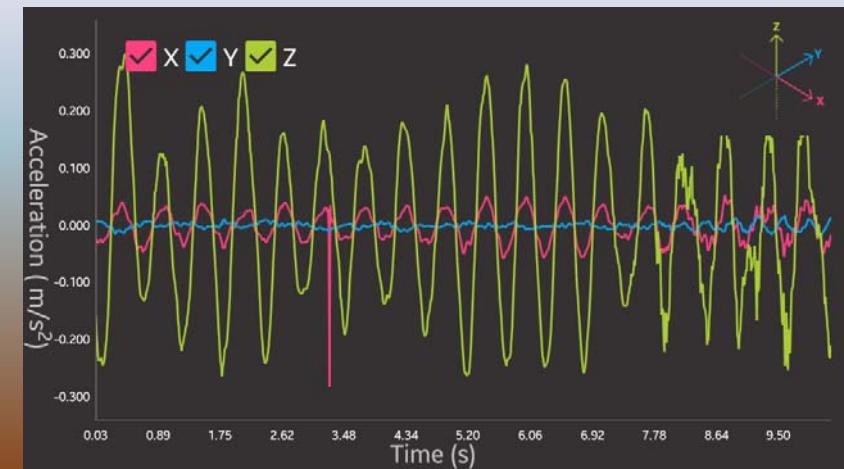


**Peak Acceleration  
0.3m/s<sup>2</sup> (3.0%g)**

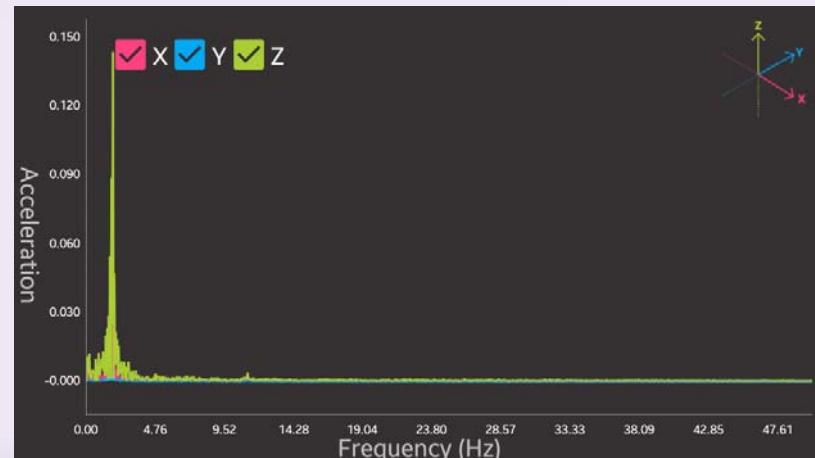
**Natural Frequency**

**1.8Hz**

**Response Factor 16**



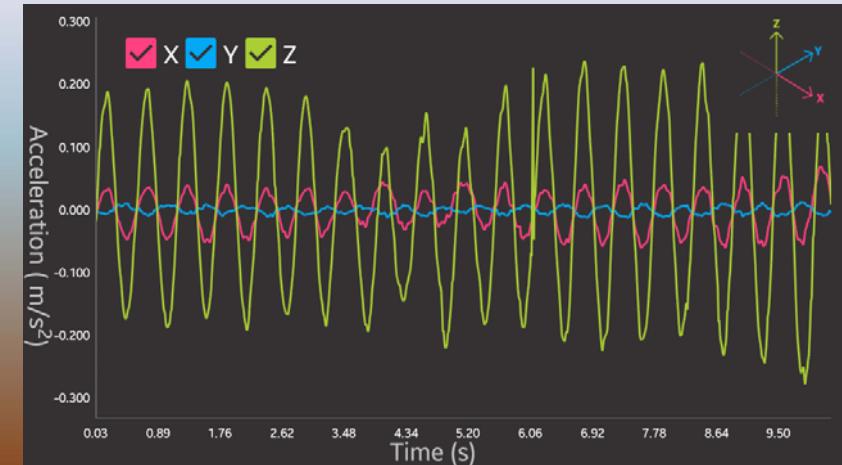
## 2. Quarter-span Outer Edge Plot



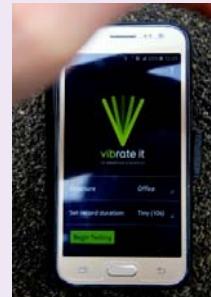
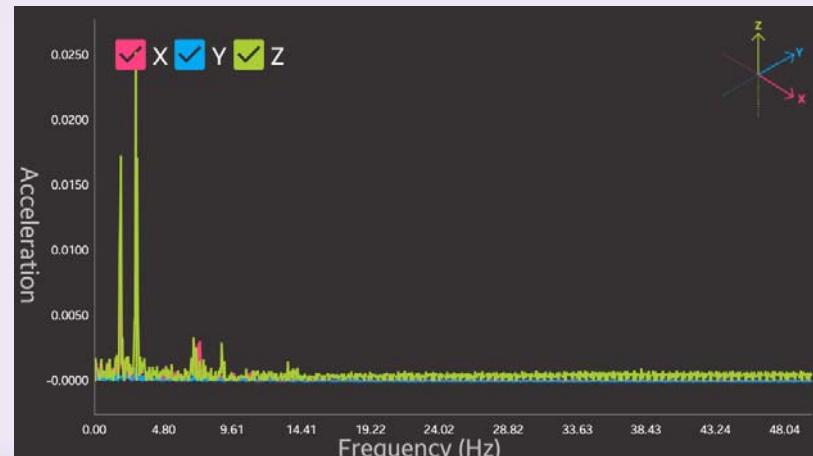
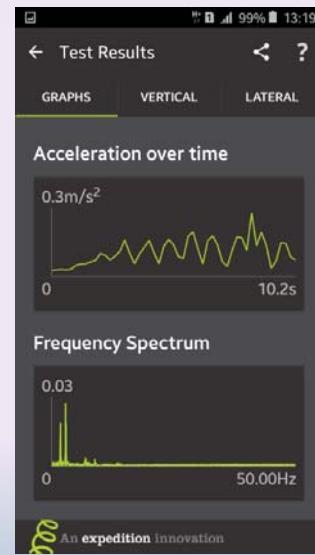
**Peak Acceleration  
 $0.22 \text{m/s}^2 (2.2\%g)$**

**Natural Frequency  
1.8Hz**

**Response Factor 16**



# 1. Quarter-span Inner Edge Plot



**Peak Acceleration  
 $0.3 \text{m/s}^2$  (3.0%g)**

**Natural Frequency  
1.8Hz**

**Response Factor 16**

