Mechanical Resonance

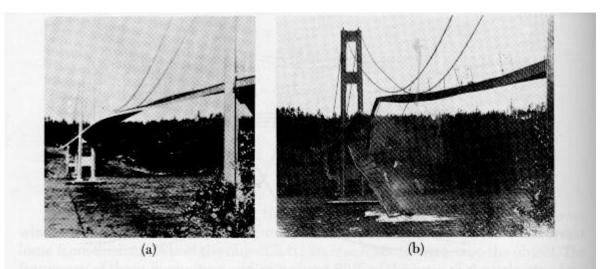


Figure 5 (a) High winds set up vibrations in the bridge, causing it to oscillate at a frequency near to one of the natural frequencies of the bridge structure. (b) Once established, this resonance condition led to the bridge's collapse. (UPI/Bettmann Newsphotos)



Understanding the *Tacoma Narrows Bridge* (*Galloping Gertie*) collapse – harmonics and mechanical resonance...