

Boom-Camera coordination

- Targeted at mostly novice boom operators / experienced operators performing complex shots
 - As detailed in our outreach to the professional / hobbyist community, most didn't find the need for Boom detection in simple shots
 - Lengthier, more complex shots (involving motion of camera while filming) were, of course found to be a more difficult situation
- Becomes more of a crutch if it warns during easy shot (when operator just wants to get closer)
- Potential as heart-beat to allow the operator to know it's functioning
 - Increase amplitude, frequency, and pitch as proximity nears
 - Amplitude increasing as quadratic function (lower gain at lower proximities)
 - Pitch must hit sweet-spot of high-alert frequencies at peak
 - Heartbeat must produce a reasonable "punch" in its sound design
 - Various locations have different ambience, (better to consider for the worst case scenario)
 - Boom operators are not lacking attention
 - Need more of a status than an alert
- Wearable form
 - Boom Operators typically have headphones connected to some device
 - Matter of adding this system as an input
- Coordination with Camera
 - Signal to indicate change in motion
 - Audio indicating direction would be best done with virtual surround sound
 - Countdown to indicate beginning of change

Resulted design -

Processing Sketch with sound output based on "proximity" to camera field. Gain of sound playback (heartbeat) will be quadratically dependent on the proximity while the rate increases linearly (up to 2x faster). We the quadratic function to model this optimally since we wanted the longer distances to produce much less sound (more so than linearly)

Light Set-Up Coordination

- Problem arising in overworking / lack thereof light department manager (Gaffer)

Design

- Need communications system to quickly and efficiently micromanage workers carrying around heavy equipment
- Different people working on different parts (usually inexperienced)
 - Different departments also involved in this set-up (i.e., sound wiring)
- Very difficult to generalize a solution - waiting on expert contact