

I PRO 344

Improving Energy-Efficiency
& Offering Quality Audio in
Mobile Devices & Intercoms



The Problem

- Lack of **standardized test data and methodology** for evaluating the audio quality of a two-way communication system performing in a high noise level environment.





Team Organization





Project Goals

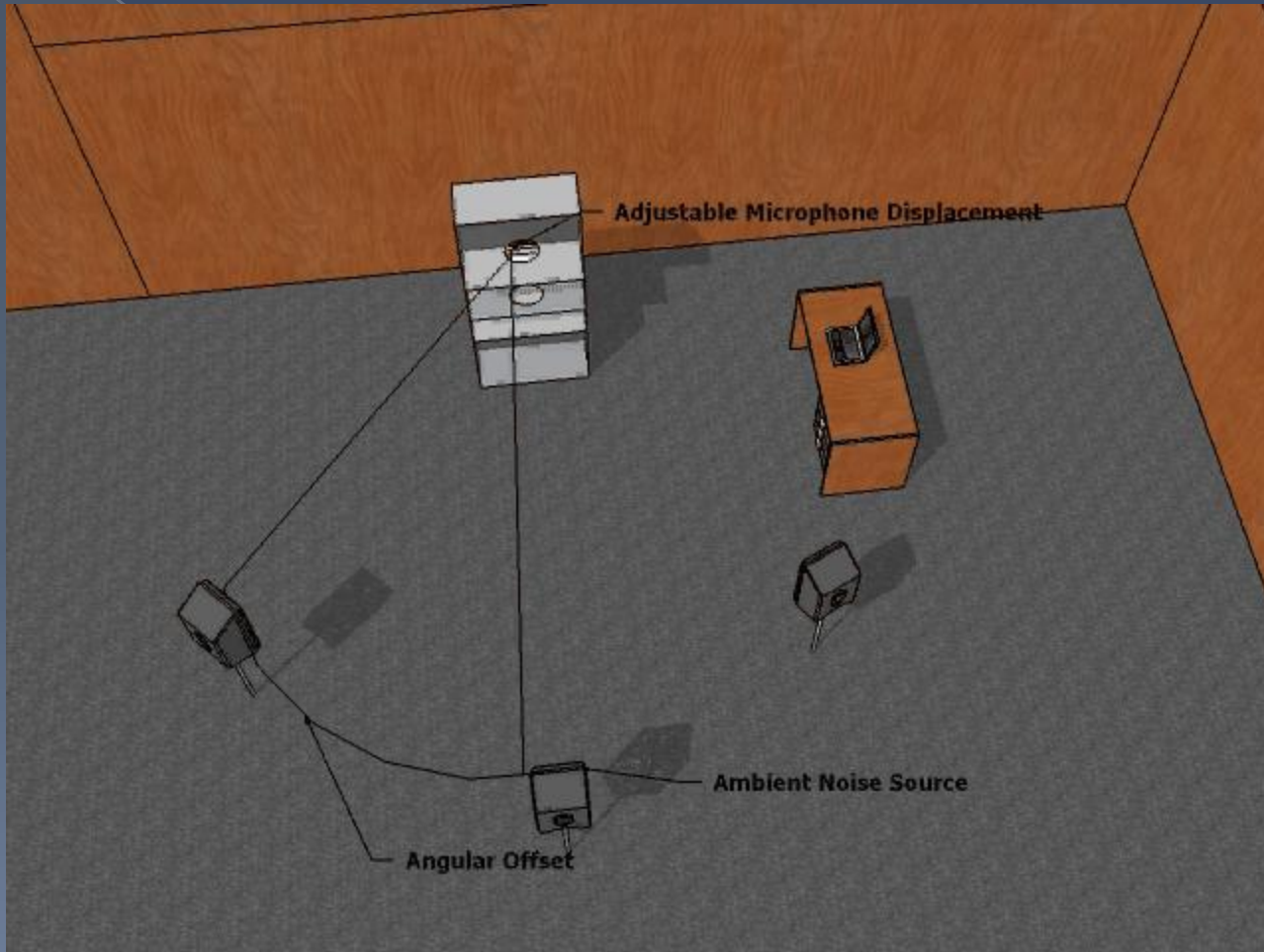
- Improve audio performance of kiosk
 - > Microphone placement
 - > Equalization
 - > Noise cancellation
- Gather empirical test data
 - > Ambient noise interference
 - > SII/STI standards
 - > Human perception
- Establish standards for testing and results
- Refine kiosk and electronic hardware
 - > Repackage SSM
 - > Improve kiosk rear access panel



Progress Toward Goals

- Decided on at least one standard of measuring, STI with the possibility of SII.
- Parts for SSM have been ordered and received.
- Acquired testing location in which kiosk may be set up constantly, so there is no time wasted setting it up and taking it down.

Progress, Continued





Obstacles Encountered

- Not enough real world data
- No base comparison
- Stand-alone programs for analyzing data
- Not enough time
- Controlling work space environment



Anticipated Challenges

- The compatibility of the CPG with the rest of the system
- Amount of time needed to conduct tests
- Copyright issues when representing data
- The availability of the testing location
- Expansion of proposed tests



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THANK YOU



Q & A