**Major Equipment**

List major items of equipment already available for this project and, if appropriate, identify location and pertinent capabilities of each.

***Remove blue instructive text prior to submission.***

***Example:***

*Assigned to the PI:*

1. *Standard professional audiocassette decks (3; Sony Model 810) with heavy-duty transports, a three-head design and Dolby-noise-reduction systems B, C and S.*
2. *Video recorders / playback units (4; Frontier model 8C) with formats ranging from analog U-Matic to the latest digital configurations, including VHS, VHS-C, SVHS, 8mm, Hi8, time-lapse, 6mm digital, and 8mm digital.*
3. *[Continue listing major equipment]*

*Core Equipment:*

*The equipment in the core Audio Enhancement Laboratory, which has been described in the Facilities and Other Resources section includes:*

1. *Digital-adaptive enhancement processor (Acoustic Engineering, model E) that allows implementation of the full range of the filter algorithms, as well as comprehension and limiting functions.*
2. *Spectrum analyzer (Harmon model 1600) with fast-Fourier transform device (>16-bit resolution and frequency-display rangers adjustable from 0-100 Hz up to 0-20 kHz) and single-channel capability. It has at least 800 lines of resolution on any frequency ranger and zoom capability*
3. *[Continue listing major core equipment]*

*Equipment Shared With Other Investigators:*

*The following are pieces of equipment are in the laboratories of other investigators who have agreed to provide access ‘on demand’ (see letters of support from Oliphant and Kaplan) for the purpose of making and authenticating computer-based voice identifications. Use of the equipment will be granted within 24 hours of a request being made, with most access given immediately.*

1. *Analog sound spectrograph (DC Live / Forensics, model B), which is in the laboratory of Dr. Maynard Oliphant. It has up to 32,000 band graphic EQ; flashback review, real-time coefficient display; time domain adaptive filter and frequency; time stamp; DeClipper; and signal-triggered VOX recording.*
2. *High-Speed IBM computer system (located in the laboratory of Dr. James Kaplan) with a fast processor, a large (32 inch) monitor, an input for digital video and hard-drive storage sufficient (24 terabytes) to handle the video applications of the project.*

*The pieces of major equipment described in this section, together with minor equipment described under Facilities & Other Resources, collectively constitute an audio-video forensic laboratory that has the full range of capabilities needed to complete the proposed project.*