

**Contractor's Progress, Status and Management Report --
Monthly Progress Report**

**Period Covered by the Report
1 April through 30 April 2000**

Date of Report: 12 May 2000

Wrist Interactive Device for Wearable PC
SBIR Phase II Topic N95-137
Contract No. N00421-97-C-1293
Dollar Value \$1,708,653

ViA Inc.
12550 West Frontage Road
Burnsville, MN 55337

Sponsor
Charles D. Caposell
Naval Air Systems Command
AIR-4.5T

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1. Progress & Plans

Hardware

Phase 3/4 Boards

Expected delivery date on the CPU and Display boards is May 15.

RF

Design of Phase 4 RF board is completed. Layout and mechanical design of case are scheduled to occur in May. We have identified a SMT Bluetooth antenna of very small size made by Moteco and are in the process of ordering it.

Audio

Design of the Phase 4 audio board is completed. Layout and mechanical design of case are scheduled to occur in May.

Optics

The mechanical design of the lens mounting system and lightbox has been completed.

Battery System

Testing of the battery protection circuit and of the battery cells themselves in both charging and discharging modes was completed successfully. A charger was identified and ordered.

Mechanical Design

The mechanical design tasks that have been completed are:

- On/Off switches mounting in main case
- Completion of light box design
- Mounting of lens and finalization of plastic case

The mechanical design tasks that remain to be completed are:

- Audio module case
- RF module case
- Battery case, battery charger, and attachment to battery module on wrist band
- Wrist band clasp

These tasks have been scheduled and are expected to be completed by early June.

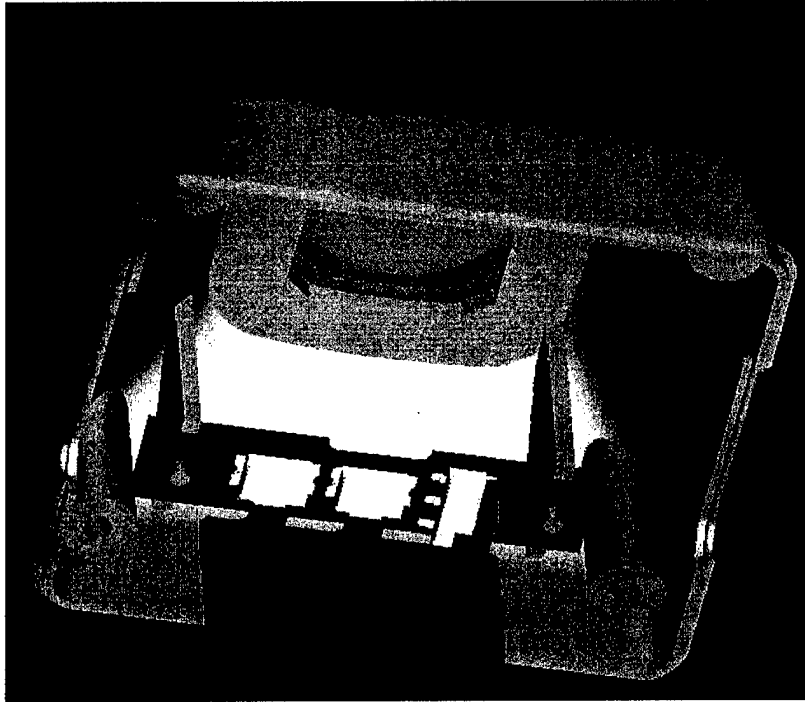


Fig. 1 Switch assembly

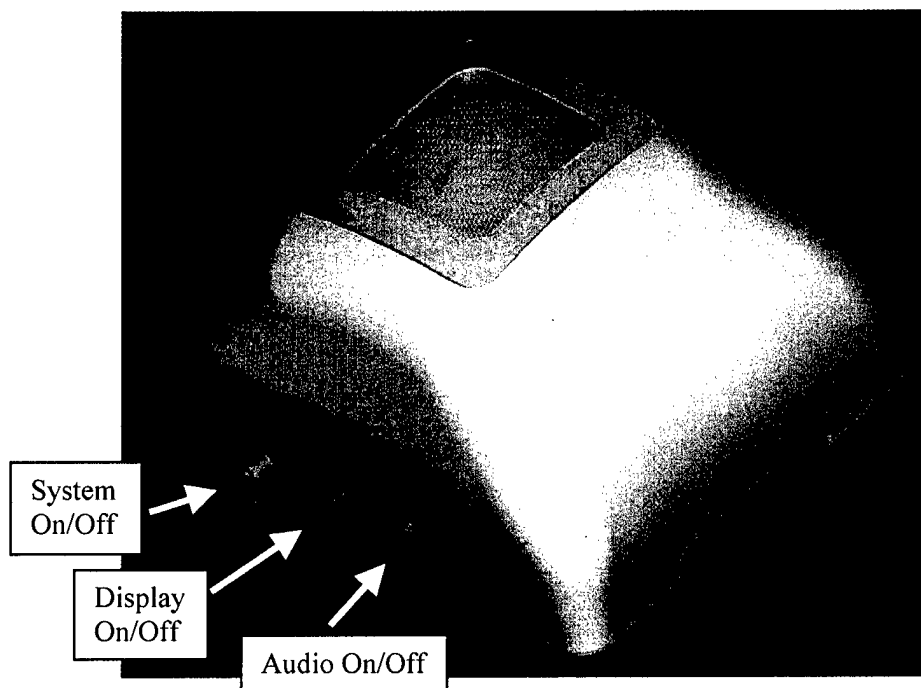


Fig. 2 Bezel for mounting of lens and switches



Fig. 3 Lightbox with frame holding LED cluster

Software

Bluetooth Drivers

Work is progressing to render the Bluetooth drivers under Windows CE robust and well engineered.

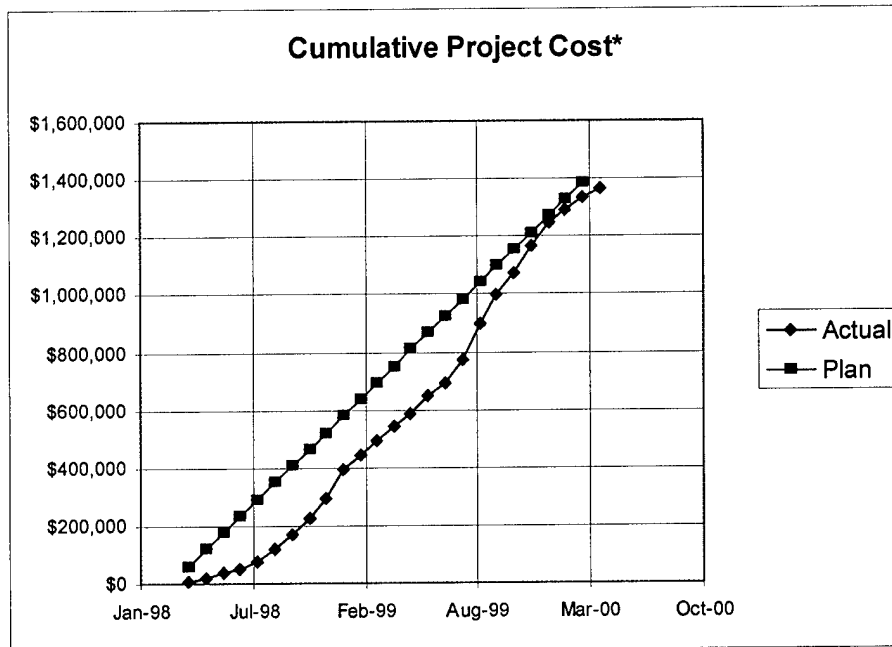
The Bluetooth driver on the Windows 98, host side, is completed. The management of graphical data is almost completed. The remaining task is the management of the audio data.

Audio Drivers

Work is underway to develop a CE audio driver to allow communication between the StrongARM processor and the DSP. Andrea Electronics is waiting for us to finalize the microphone locations in the audio case in order to fine-tune their phase-filtering software.

High-Level CE Software

No work was done in the month of April on the high-level CE software.



***without G&A and fee**

2. Project Cost

Cost incurred for the period and total cost, without G&A and Fee:

| Current Month's Cost* | Cumulative Cost |
|-----------------------|-----------------|
| \$30,624 | \$1,364,358 |

* Current month cost is 1 April through 30 April

Person-hours for the period and cumulatively:

| Current Month's Hours | Cumulative Hours |
|-----------------------|------------------|
| 415 | 17,226 |

3. Schedule and Staffing

Delivery of Digianswer/Motorola Bluetooth PC cards is expected in July. Unless software issues arise at this point, the WID prototypes should be ready for delivery shortly thereafter.

4. Author

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