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AQ499-06-1155

James J. Chiras
Authorized Signature/Date

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

**Period Covered by the Report
1 January through 31 January 1999**

Date of Report: 15 February 1999

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.
11 Bridge Square
Northfield, MN 55057

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

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1. Progress & Plans

Significant progress on the StrongARM engineering boards has been made. There will be a main board and a mezzanine board. The mezzanine board contains, primarily, input/output capabilities that are necessary for the initial development but are not required in the final configuration. The schematic capture, routing, layout, parts placement, and inventory of the main PCB is complete. The schematic capture and initial routing of the mezzanine boards is also complete and is awaiting final review.

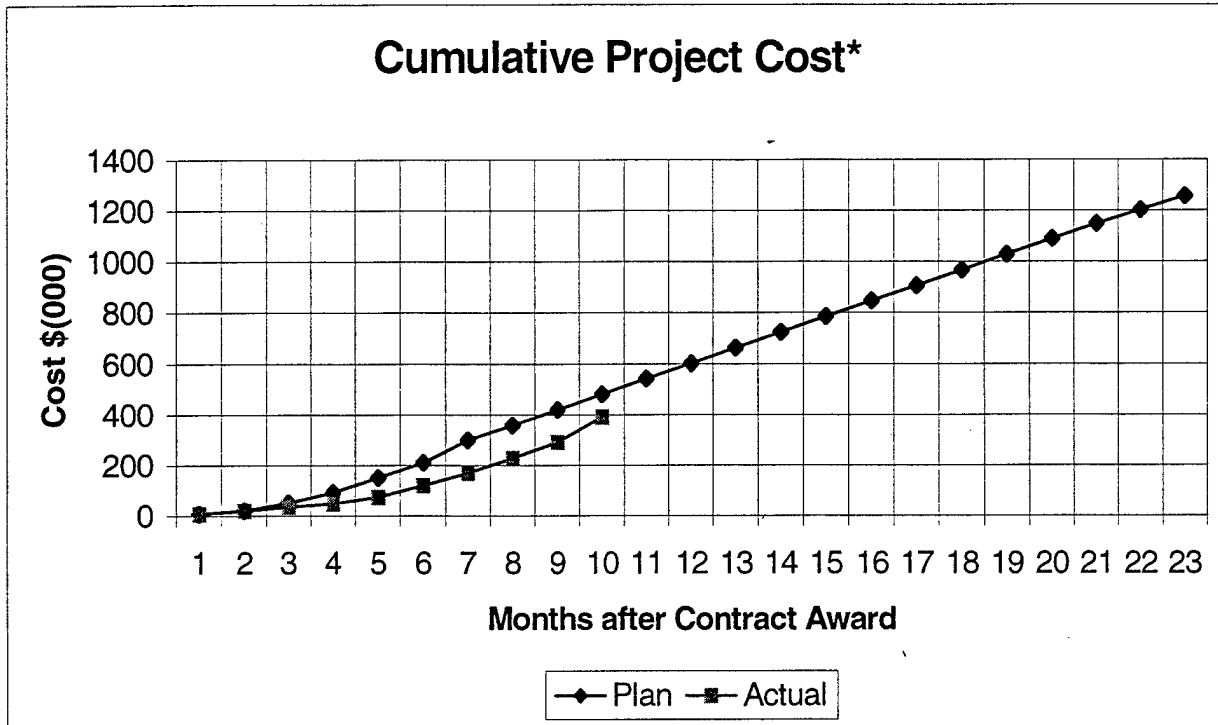
ViA received the digital interface board from Xetron last week. We have verified functionality of the hardware and software, but in the process one of the RS-232 boards was damaged, probably due to ESD/EOS. Xetron will shortly deliver a replacement board to ViA.

Actual RF boards are expected in February. Once we have amiable communications between the two computers using a null modem cable, we will test the RF link by swapping the cable for the RF board. According to Xetron this process should be transparent to the radio and computers.

The initial radio boards will be constrained to 32-38 Kbps. In April, we expect to receive an upgrade to the Xetron units that will bring the aggregate bandwidth to approximately 100 Kbps. Once ViA transitions to the Xetron ASIC, there is the opportunity for further bandwidth increases to 200 Kbps.

Development of the distributed video display driver has progressed. Currently, we have support for rectangles, polylines, bitmaps, and lines in color (previously, only black lines were being displayed). In February, we will be porting the display driver to Windows CE as well as performing a port of CE to our StrongARM system.

2. Project Cost



*w/o G&A and fee

Cost incurred for the period and total cost which does not include G&A and Fee.

Current Month's Cost*	Cumulative Cost
\$100,440	\$392,226

* Current month cost is 1 January through 31 January.

Person-hours for the period and cumulatively.

Current Month's Hours	Cumulative Hours
1073.50	4915.55

3. Schedule and Staffing

The next Technical Interchange Meeting was scheduled to take place on February 10. The meeting was postponed by request of DARPA. ViA expects to hold the meeting at the end of February or early March and is working to have several capabilities demonstrable within that timeframe. Specifically, ViA expects to demonstrate two optical designs, preliminary StrongARM-based engineering boards, and preliminary distributed video drivers.

4. Author

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