REPORT DOCUMENTATION PAGE

1a. REPORT SECURITY CLASSIFICATION
   Unclassified

1b. RESTRICTIVE MARKINGS

2a. SECURITY CLASSIFICATION AUTHORITY

2b. DECLASSIFICATION/DOWNGRADING SCHEDULE

3. DISTRIBUTION/AVAILABILITY OF REPORT
   Approved for public release; distribution unlimited

4. PERFORMING ORGANIZATION REPORT NUMBER(S)

5. MONITORING ORGANIZATION REPORT NUMBER(S)
   AFOSR-TR-87-0969

6a. NAME OF PERFORMING ORGANIZATION
    University of Virginia

6b. OFFICE SYMBOL
    (If applicable)

6c. ADDRESS (City, State and ZIP Code)
    Thorton Hall
    Charlottesville, VA 22901

7a. NAME OF MONITORING ORGANIZATION
    AFOSR/NM

7b. ADDRESS (City, State and ZIP Code)
    Bldg 410
    Bolling AFB DC 20332-6448

8a. NAME OF FUNDING/SPONSORING ORGANIZATION
    AFOSR

8b. OFFICE SYMBOL
    (If applicable)

8c. ADDRESS (City, State and ZIP Code)
    Bldg 410
    Bolling AFB DC 20332-6448

9. PROCUREMENT INSTRUMENT IDENTIFICATION NUMBER
   AFOSR-85-0102

10. SOURCE OF FUNDING NO.

   PROGRAM ELEMENT NO. 61102F
   PROJECT NO. 2917
   TASK NO. A5
   WORK UNIT NO.

11. TITLE (Include Security Classification)
    Final

12. PERSONAL AUTHOR(S)
    Professor Stephen Wilson

13. TYPE OF REPORT
    Final

13a. TIME COVERED
    FROM TO

14. DATE OF REPORT (Yr., Mo., Day)

15. PAGE COUNT
    3

16. SUPPLEMENTARY NOTATION

17. COSATI CODES

18. SUBJECT TERMS
   (Continue on reverse if necessary and identify by block number)

19. ABSTRACT
   (Continue on reverse if necessary and identify by block number)

20. DISTRIBUTION/AVAILABILITY OF ABSTRACT
    UNCLASSIFIED/UNLIMITED

21. ABSTRACT SECURITY CLASSIFICATION
    Unclassified

22. NAME OF RESPONSIBLE INDIVIDUAL
    Major Woodruff

22b. TELEPHONE NUMBER
    410-644-4963

22c. OFFICE SYMBOL
    NM

DD FORM 1473, 83 APR
EDITION OF 1 JAN 73 IS OBSOLETE.
SECURITY CLASSIFICATION OF THIS PAGE
AFOSR-TR-87-0969

FINAL REPORT

to

Air Force Office of Scientific Research

Bolling Air Force Base

Washington, D.C. 20332

University Research Instrumentation Procurement

by

Stephen G. Wilson

Department of Electrical Engineering

Thornton Hall

University of Virginia

Charlottesville, VA 22901

April, 1986
This report describes procurements made under contract number AFOSR-85-0120, as part of the Department of Defense, University Research Instrumentation Program. The equipment purchased is in support of analysis and encoding of color motion imagery. Installation of all equipment has been completed and is functional, attached to a VAX 11/750 in the Department of Electrical Engineering and the Center for Computer Aided Engineering.

The major expenditure was for a Gould IP8400 imaging system with high-speed (30 frames per second) color storage and display. This system is operated as a peripheral on the VAX 11/750 running UNIX. To support image processing tasks, a CDA Array Processor was also purchased and attached to the system bus. Finally, to aid in data presentation, a hard-copy print camera was purchased from NISE Corp. A complete list of expenditures is included in Table I.

The equipment is presently being used for a variety of image processing tasks, both for still and moving images. Plans include doing computer vision research and interdisciplinary work with groups who need real-time display of imagery.
**TABLE I**

<table>
<thead>
<tr>
<th>Description</th>
<th>Price</th>
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<tbody>
<tr>
<td>Gould</td>
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<tr>
<td>IP8400 Processor Controller</td>
<td>18,450.00</td>
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<tr>
<td>IP85M Image Memory</td>
<td>12,600.00</td>
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<tr>
<td>IP85 VOC Video Output Control</td>
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<td>IP85TB2 Trackball</td>
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<td>IP85CG Dual Cursor Generator</td>
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<td>IP85AN Alphanumeric Overly Generator</td>
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<tr>
<td>IP85DVP Digital Video Processor</td>
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<td>IP85VD1 Video Signal Digitizer</td>
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<td>IP85PILL External Sync Receiver</td>
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<tr>
<td>IP8DMA DEC DMA Interface</td>
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<td>IP8MS1 Multi-Sync Model</td>
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<tr>
<td>CM19LC RGB Monitor, 19 Inch</td>
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<tr>
<td>SIP8DEMVMVS Dec Demo. Software</td>
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<tr>
<td>IP85DOC I Documentation</td>
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</tr>
<tr>
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<td>.00</td>
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<tr>
<td>IP85DOCIV Documentation</td>
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<tr>
<td>SIP8LPVMS LIPS V.4.0. (Second User)</td>
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<tr>
<td>CX25 Coaxial Video Cable, 25 Foot</td>
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<tr>
<td>M20-1 HI-Speed Disk System, 300 MB</td>
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<td>CDA</td>
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<tr>
<td>Array Processor with 512 Kb Memory</td>
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<td>NISE, CORP.</td>
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<tr>
<td>3500 F Film Recorder</td>
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<tr>
<td>V10 16.77KHZ Horizontal Sweep Rate</td>
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<tr>
<td>R10 RGB</td>
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<tr>
<td>P10 100-120 VAC, 50/60 HZ</td>
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<tr>
<td>C50 Camera with Polaroid CB-71 Black</td>
<td>950.00</td>
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**Total**                                          | **129,864.00**
END
DATE
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DEC.
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